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Univ. of Toronto - Revenues and Requirements - 1891

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—AND—

UNIVERSITY COLLEGE.

REVENUES AND REQUIREMENTS.

REPORT OF A COMMITTEE

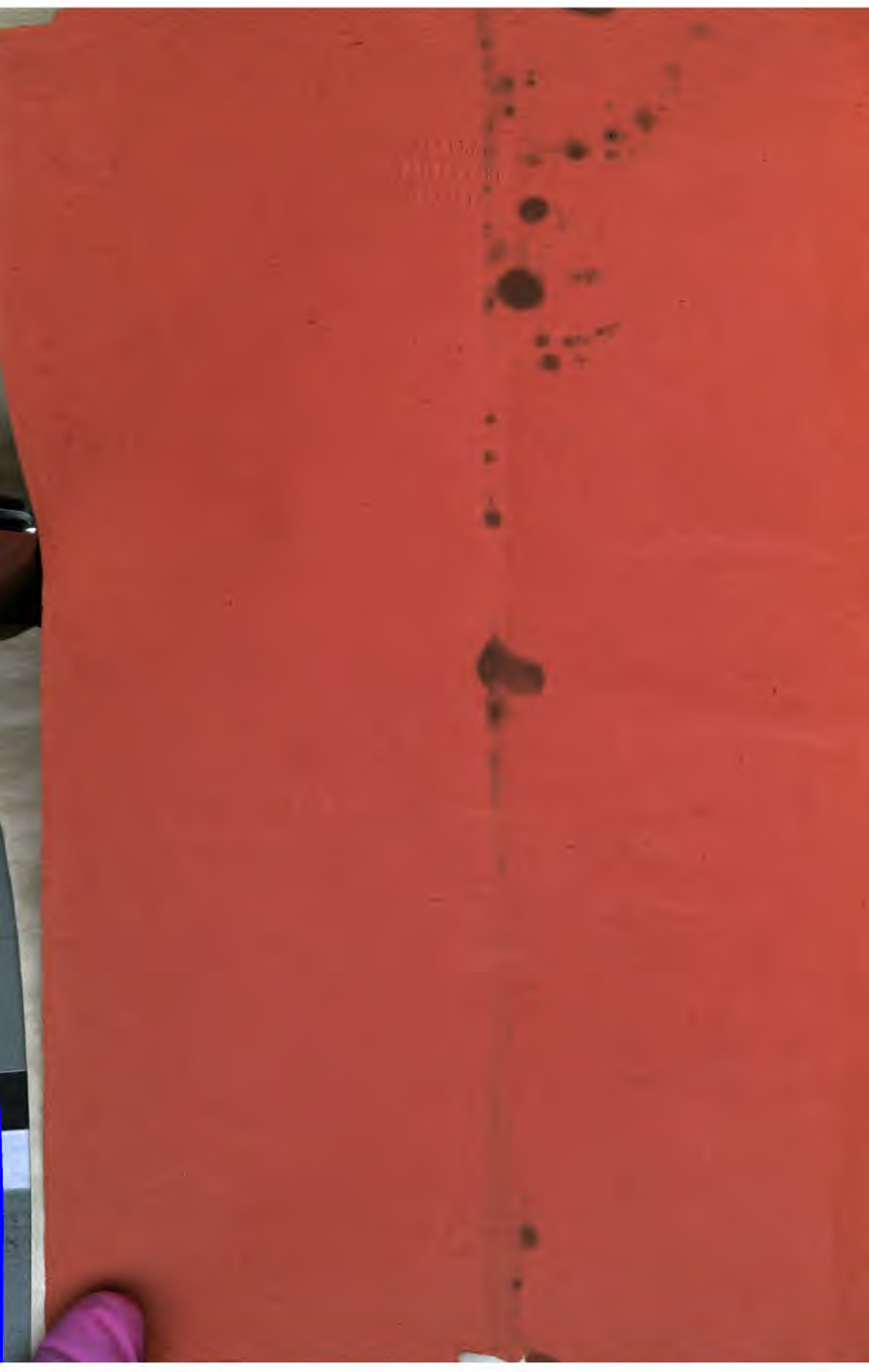
APPOINTED BY THE SENATE OF THE UNIVERSITY OF TORONTO, AND ALSO
BY THE BOARD OF TRUSTEES,

APRIL 13th, 1891.

TORONTO.

PRINTED BY WARWICK & SONS, 63 AND 70 FRONT STREET WEST.
1891.





UNIVERSITY OF TORONTO

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UNIVERSITY OF TORONTO.

REPORT OF THE COMMITTEE APPOINTED BY THE SENATE AND ALSO BY THE BOARD OF TRUSTEES.

The Committee appointed under the following resolutions of the Senate and the Board of Trustees :

Senate resolutions, Saturday, January 10th, 1891 :

“(1) Resolved, that the president, the vice-chancellor and the mover (Hon. Mr. Blake) be appointed a committee to inquire into and report upon the present and prospective revenues and the most urgent pecuniary requirements of the University and of University College, and as to the time, mode and order in which these requirements should be dealt with.

“(2) Resolved, that the memorials from the lecturers in German, French and Latin, and from the lecturers in English and Greek, and all former memorials and reports of committees relative to the subject be referred to the above committee.”

Board of Trustees resolution, Thursday, January 15th, 1891 :

“The Board of Trustees, learning that the Government desires a full report as to the present and prospective financial condition of the University and its urgent pecuniary requirements, and the time, mode and order in which they should be dealt with, and that the Senate has appointed the chancellor, vice-chancellor and president a committee to inquire into and report thereon, appoints the same persons on its part a committee to inquire into and report thereon in so far as this Board is concerned in such inquiry.”

beg to report as follows :

They have conferred with the members of the Faculty ; obtained and collected their written statements ; received various persons and deputations ; examined into numerous matters involved in the reference ; and deliberated frequently as to the course to be recommended.

They have thought it not irrelevant, but on the contrary important, to endeavour to set out some principles and theories on which, as they conceive, action should be based.

In view of the scope of the reference and of the condition of the finances, they have not attempted to frame an ideal organization, or even to dispose of all the claims forcibly presented. It seemed sufficient to deal with the more urgent claims, to an amount which there is some hope of overtaking in the course of the next two financial years; and to defer the residue till the conditions of the revenue offer some prospect of further relief.

In dealing with so great a variety of delicate and disputable points, and such a complication and competition of claims and interests, they are not so presumptuous as to affirm that they have avoided all errors of judgment ; still less can they hope that they have met everybody's wishes.

But they have taken care to embody in their report the statements laid before them, and thus to give the materials for correcting any mistakes into which they may have fallen.

The report is divided into the following parts :

PART I.

RESOURCES.—PLAN FOR REALIZATION OF PROPERTY.—INCOME.—EXPECTATIONS.—DETAILED COMPARATIVE TABLES FOR TEN YEARS.

PART II.

Expenditure.

DETAILED COMPARATIVE TABLES FOR TEN YEARS.—EXPECTATIONS.—REMARKS ON TABLES OF INCOME AND EXPENDITURE, INCLUDING THE SUBJECT OF SCHOLARSHIPS.

PART III.

Buildings.

MAIN BUILDING RECONSTRUCTION.—PROPOSED LIBRARY BUILDING AND BOOKS.—MUSEUM SPECIMENS, ETC.—GENERAL FINANCIAL RESULTS.—BIOLOGICAL LABORATORY : EVIDENCE AND RECOMMENDATIONS.—BIOLOGICAL MUSEUM ADDITION : EVIDENCE AND RECOMMENDATIONS.—CHEMISTRY : EVIDENCE AND RECOMMENDATIONS.—MINERALOGY AND GEOLOGY : EVIDENCE AND RECOMMENDATIONS.—GYMNASIUM AND STUDENTS' UNION : RECOMMENDATION.—RESIDENCE : EVIDENCE AND RECOMMENDATION.—CONVOCATION HALL : RECOMMENDATION.—GENERAL FINANCIAL RESULTS.—FINANCIAL SCHEME.

PART IV.

Theoretical Arrangement of Offices.

ASSOCIATE PROFESSORS.—REPRESENTATION COUNCILS.—APPOINTMENTS AND PROMOTIONS.—SALARIES.—APPLICATION TO EXISTING STAFF.—RETIREMENT FUND.—APPLICATION OF REGULATIONS THEREFOR.—PROPOSALS FOR IMMEDIATE ACTION THEREON.—FINANCIAL RESULTS AND CASH OUTLAY.

PART V.

Increase and Organization of the Teaching Staff

GENERAL REMARKS AND RECOMMENDATIONS.—POLICY AS TO INCREASE OF YEARLY CHARGE.—REMARKS AS TO PAST INCREASES.—DETAILED COMPARATIVE TABLES FOR TEN YEARS.—MODERN LANGUAGES (FRENCH, GERMAN, ITALIAN AND SPANISH), LATIN, GREEK, ENGLISH, PHYSICS, MATHEMATICS, PHILOSOPHY, CHEMISTRY, MINERALOGY AND GEOLOGY, BIOLOGY, POLITICAL SCIENCE, ORIENTAL LANGUAGES : EVIDENCE AND RECOMMENDATIONS.—LIBRARIAN : EVIDENCE AND RECOMMENDATION.—GENERAL RESULT OF RECOMMENDATIONS IN THIS PART.—CLERKS, ASSISTANTS AND SERVANTS.

UNANIMOUS ADOPTION OF REPORT.

PART I.

RESOURCES.—PLANS FOR REALIZATION.—INCOME.—EXPECTATIONS.—COMPARATIVE TABLES.

RESOURCES.

The material resources of the University of Toronto and University College are composed of :

- (1) Lands and buildings, and land claims.
- (2) Mortgages and purchase moneys.
- (3) Debentures.
- (4) City payment.
- (5) Fees.

(1) Lands and buildings :

(a) Those required and reserved for the work of the institutions, being the block of land south of Hoskin avenue and west of the Western Park Drive on which are situated the University buildings.

(b) The lands contiguous to the Queen's Park and College street, comprising lands rented on renewable leases ; and lands open for sale or lease.

(c) The lands called the Upper Canada College block, bounded by King street, Adelaide street, Simcoe street and John street ; open for sale or lease.

(d) Detached properties on York street, Queen street and Front street under lease ; and some small outlying properties of trifling value.

(e) Land claims, including claim for allowance as ground rent for the site of the School of Practical Science ; and claim for allowance as ground rent for the site of the Parliament Buildings.

(2) Mortgages as of 1st July, 1890, \$562,101.54.

(3) Debentures as of same date, \$385,812.38.

(4) City of Toronto, perpetual annual payment towards Chairs, of \$6,000 a year, equal on a capitalization at 5 per cent., to \$120,000.

(5) Fees ; a varying amount, subject to large deductions for expenses of examinations. Gross estimate from \$17,000 to \$20,000 a year.

The present rentals of all the leased lands amount to \$11,114 per annum, subject to great improvement on distant renewals. Their value, if free from these leases, would be very great ; but is, of course, reduced by the low rents at present in force.

The value of the unleased lands, open for sale or lease, is from one and a quarter to one and a half millions of dollars.

The claim for an allowance in the nature of ground rent for the site of the School of Practical Science is recognized, and is dealt with later in this report.

The claim for a like allowance for the site of the Parliament Buildings is disputed ; and on this, reference is made to an article by Mr. T. Hodgins, Q.C., in *The Varsity* of 21st January, 1888, and to Sir Daniel Wilson's Convocation address of 14th October, 1887.

It thus appears that the resources of the University, apart from the value of the lands and buildings reserved for the purposes of the institution, are so large as to put its future, under wise and prudent administration, beyond all doubt or question ; and to enable it by the realization of its assets greatly to increase its efficiency.

PLANS FOR REALIZATION.

Part of the block north of Hoskin avenue has been put into the market; and, although the times are dull, yet the choiceness of the situation has already enabled us to dispose of several lots; those actually sold and still under negotiation amounting to about \$90,000 in price.

The property east of the Western Park Drive, near Victoria University, is being laid out, and will be put on the market shortly.

Offers have been invited for part of the Upper Canada College block, which is thought to be specially suitable for a large down-town hotel.

The lease of the Scott street property expires in 1892, when a large addition will be made to the rent.

It is proposed to give tenants of large park lots, including unoccupied ground available for good detached residences, the opportunity of building thereon on proper conditions; and for this purpose to modify the building restrictions, on condition that the University receives a share of the profit by an improved rent.

INCOME.

The income of the University from all sources; including gross fees calculated at \$19,000; without making any allowance for a contingent fund in connection with investments, and without reckoning on any increased receipts from land sales or rentals, is estimated at about \$93,500 for the current year.

The advance of capital in connection with the Biological building has temporarily reduced the invested funds. Prudence requires the retention of a yearly sum for the formation of a contingent fund to meet possible losses on investments. To this purpose \$20,000 has already been appropriated in the course of former years; and \$5,000 a year should if possible be appropriated for some years to come; subject to increase as the mortgage investments increase, until a full guaranty fund is accumulated.

The present available income may be estimated at about \$93,500; or, making the suggested appropriation for contingent fund, at \$88,500.

EXPECTATIONS.

It is confidently hoped that within a comparatively short time the yearly income will be largely increased from the various indicated sources, and it may be reasonably expected that it will be improved before the end of the next financial year by about \$12,500 or more, producing a total of \$106,000; and that this improvement will be progressive in future years till the increase reaches at least \$50,000 a year. But, of course, as the movement depends mainly on the saleability of Toronto lands, it is impossible to calculate its rate of progress or its extent with exactness.

COMPARATIVE TABLES.

The following tables are appended:—

Statement of capital invested on mortgages and debentures as at 30th June in each of the last ten years.

Amounts invested in each of the last ten years.

Average rate of interest actually got in.

Debentures maturing; with dates of maturity.

Revenue actually received yearly from rents for ten years.

Rentals and dates of expiry of ground leases.

Receipts on income account for the last ten years.

UNIVERSITY OF TORONTO.

STATEMENT OF CAPITAL INVESTED IN MORTGAGES AND DEBENTURES AS AT THE 30TH JUNE EACH YEAR.

	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
Invested in First Mortgages.....	562,101 54	588,841 43	580,496 35	575,308 10	551,211 79	409,520 86	280,298 87	232,767 98	212,936 91	177,511 17
Invested in Debentures	386,812 38	430,121 93	441,068 72	442,315 19	467,363 36	526,947 61	751,664 61	749,802 61	772,740 61	794,666 61
	947,913 92	1,018,963 36	1,021,565 07	1,017,623 29	1,018,565 14	936,469 47	1,011,963 48	982,570 59	985,677 52	972,207 78

REVENUE ACTUALLY GOT IN FROM ABOVE IN EACH YEAR.

Interest on Mortgages	35,757 92	38,143 27	32,666 66	32,027 26	24,533 40	17,178 08	14,906 00	15,253 19	11,757 48	5,250 78
Interest on Debentures.....	23,710 87	24,661 49	23,200 87	26,146 75	28,404 72	42,231 90	43,702 73	43,962 60	47,329 86	45,104 93
	59,468 79	62,804 76	55,867 53	58,174 01	52,938 12	59,409 96	58,608 73	59,215 79	59,087 34	50,355 71

AVERAGE RATE OF INTEREST ACTUALLY GOT IN AS SHEWN BY ABOVE RECEIPTS.

Average rate of Interest from Mortgages.....	6.1 p.c.	6.58 p.c.	5.68 p.c.	5.81 p.c.	6.00 p.c.	6.6 p.c.	6.4 p.c.	7.17 p.c.	6.62 p.c.	
Average rate of Interest from Debentures.....	5.51 p.c.	5.6 p.c.	5.47 p.c.	5.6 p.c.	5.4 p.c.	5.6 p.c.	5.83 p.c.	5.7 p.c.	5.96 p.c.	

Average rate of interest actually got in for nine years from mortgages, 6.33 per cent.

Average rate of interest actually got in for nine years from debentures, 5.63 per cent

AMOUNTS INVESTED EACH YEAR—UNIVERSITY.

	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Loans	37,086 02	92,104 32	64,183 25	62,712 37	168,057 00	160,915 88	37,086 79	35,367 83	40,335 91	126,497 17
Invested in Debentures	14,075 24		18,409 45	1,555 00	29,132 47	3,453 14	19,221 56	9,269 00	47,567 35	
Invested in St. George St. property		920 65								
do York Street property		14,000 00								
do Queen Street property		10,500 00								
	51,111 26	117,525 57	82,682 70	64,267 37	197,189 47	164,368 97	56,308 35	44,636 83	87,903 26	126,497 17

UNIVERSITY OF TORONTO.

Debentures Maturing 1891 to 1909.

1891	\$ 85,700 67
1892	29,646 56
1893	173,794 66
1894	8,134 36
1895	3,153 15
1896	10,132 48
1897	2,349 91
1898	12,411 42
1899	8,784 58
1900	33,207 80
1901	4,923 45
1902	4,125 88
1903	4,187 80
1904	1,253 12
1905	1,322 05
1909	9,800 00
	<hr/>
	\$392,927 89
1910	2,433 33
	<hr/>
	\$395,361 22

REVENUE RECEIVED YEARLY FROM RENTS.

	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Rents.....	2,861 20	2,356 93	1,615 33	1,511 67	940 00	1,041 00	996 75	973 71	600 00	913 00
Rents University Park	7,900 92	8,376 61	9,057 00	6,982 00	6,121 30	6,283 00	5,250 00	5,755 00	5,992 50	5,403 17
	10,462 12	11,733 54	10,672 33	8,493 67	7,070 30	7,324 00	6,246 75	6,728 71	6,592 50	6,316 17

UNIVERSITY PARK RENTS.

Statement shewing dates on which leases expire together with their annual rentals.

Year of expiration.	Rentals of leases then expiring.
1902.....	\$125 00
1904	75 00
1905.....	100 00
1906.....	110 00
1908.....	200 00
1911.	100 00
1912	240 00
1914.....	680 00
1916.....	1,020 00
1917.....	1,015 00
1918.....	1,030 00
1924	300 00
1925.....	200 00
1926	690 00
1928.....	2,604 00
	<hr/>
	\$8,489 00

SUMMARY OF RENTS.

	1st January, 1891.	
	Amount.	Expires in
University Park (as above).....	\$8,489 00	....
Latham property	600 00	1892
York street "	600 00	1908
Queen " "	600 00	1909
South Lodge.....	425 00	....
Bursar's office	400 00	...
	<hr/>	
	\$11,114 00	

RECEIPTS—ACCOUNT INCOME, 10 YEARS.

ACCOUNT.	1890.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Interest on purchase money.....	859 72	1,081 97	1,709 19	1,645 70	1,936 75	2,086 89	2,600 04	3,057 26	3,384 69	4,208 50
“ loans.....	35,757 92	38,143 27	32,666 66	32,027 26	24,533 40	17,178 06	14,906 00	15,253 19	11,757 48	5,250 78
“ debentures.....	23,710 87	24,661 49	23,200 87	26,146 75	23,404 72	42,231 09	43,702 73	43,962 60	43,329 86	45,104 93
“ bank balances.....	1,070 01	1,017 68	745 20	1,511 67	734 42	75 04	996 75	973 71	600 00	388 39
Rents.....	2,861 20	2,366 33	1,615 33	1,511 67	949 00	1,041 00	996 75	973 71	600 00	913 00
“ University Park.....	7,800 92	8,376 61	9,067 00	6,982 00	6,121 30	6,283 00	5,250 00	5,765 00	5,992 50	5,403 17
Pasturage.....	17 00	39 00	45 15	144 41	197 09	300 66	278 25	151 20	115 28	297 64
Fees—University College.....	17,515 84	12,764 21	12,503 63	13,431 00	11,965 04	11,673 96	10,373 08	10,761 87	6,578 50	6,596 50
City grant.....	6,000 00									
Transfer fees.....	64 00	56 00	62 50	51 50	17 00	43 89	23 00	33 00	70 50	80 75
Dividend bank stock.....	24 50	24 50	34 71	24 50	26 25	28 00	28 00	28 00	28 00	28 00
Casual accounts (See Note “A”).....	214 21	246 00	77 67	150 00	4 24		1 25	7 40	28 00	17 00
	95,866 19	88,768 66	81,717 91	82,114 79	74,889 21	80,892 40	78,159 10	70,983 23	75,884 81	68,288 66
				336 70			761 89	1,026 15	345 58	
Less interest bank account overdrawn.....				81,728 09			77,397 21	78,957 08	75,539 23	
Less interest Moss and Mulock scholarships.....			15 50	29 00			280 00	400 00		
Less interest on Medical Faculty surplus.....	329 70	208 75								
	96,896 19	88,558 91	81,702 41	81,699 09	74,541 21	80,558 40	77,117 21	78,557 08	75,539 23	68,288 66

RECEIPTS.—CASUAL ITEMS, 10 YEARS.

Note “A.”

Prince's prize closed.....	105 83									
Insurance—Loans.....	108 38		72 67							
Physical Laboratory subscription.....		50 00								
Sale microscopes.....		194 00								
Valuation fees.....		2 00			4 24			7 40		
Physical Laboratory sale.....			5 00							
Commission returned.....							1 25			
Interest on rents.....									28 00	17 00
Mulock scholarship—Amount re-transferred.....				150 00						
	214 21	246 00	77 67	150 00	4 24		1 25	7 40	28 00	17 00

PART II.

Expenditure.

COMPARATIVE TABLES FOR TEN YEARS.—EXPECTATIONS.—REMARKS ON TABLES OF INCOME
AND EXPENDITURE INCLUDING THE SUBJECT OF SCHOLARSHIPS.

TABLES.

Tables of expenditure follow, showing :—

{1) Summary of the expenditure under different heads for ten years past.

Statements of the same grouped under the proper heads as follows :

{2) Expenses of management and investment.

{3) Salaries, etc.

{4) General expenses.

{5) Buildings and grounds : maintenance, furniture, repairs, etc.

{6) Laboratories and museums : alterations and repairs.

{7) Special expenses : University.

{8) Special expenses : University College.

{9) Contingent fund.

{10) Note A—Details of expenses *re* investments.

{11) Note B—Buildings : maintenance, furniture, repairs, etc.

{12) Note C—Chemical laboratory.

{13) Note D—Biological laboratory.

{14) Note E—Physical laboratory.

EXPENDITURE FOR TEN YEARS ENDING 30TH JUNE 1890.

	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
Bursar's office	\$ 4,066 80	\$ 3,478 91	\$ 3,099 07	\$ 2,949 24	\$ 2,889 68	\$ 2,825 41	\$ 2,781 15	\$ 2,639 07	\$ 2,606 75	\$ 2,438 44
Expenses re investments, etc.	986 70	1,096 13	674 04	568 53	1,523 82	1,289 63	439 13	461 86	774 66	1,322 86
Salaries exclusive of Bursar's office and including rent of President's house	55,825 34	54,032 00	50,902 49	44,607 68	43,332 66	43,022 61	43,197 65	40,143 44	37,124 14	35,970 89
Pensions including gratuity to W. D. Pearman	1,240 00	740 00	180 60	2,666 00	3,306 00	3,306 00	3,306 00	4,706 01	6,360 19	6,667 66
Scholarships	790 00	2,743 34	2,958 64	2,840 00	4,465 01	4,054 09	4,265 00	4,718 34	3,895 00	4,275 00
Examiners	6,839 66	4,644 81	3,603 92	3,371 01	3,028 60	2,814 09	2,922 30	3,071 56	2,698 95	2,376 82
Library	2,766 61	2,502 45	2,678 24	2,556 35	2,719 36	2,539 38	2,594 46	2,613 77	2,734 45	2,498 46
Fuel	1,945 00	1,807 40	1,741 64	1,668 47	1,436 25	1,392 20	1,592 73	1,737 85	1,395 00	1,721 00
Water and gas	655 24	490 05	387 39	493 91	306 65	378 67	132 28	427 74	418 20	335 52
Telephones	95 00	80 00	97 50	115 00	115 00	115 00	115 00	115 00	63 91	80 00
Insurances	831 00	350 00	1,640 04	50 16	2,204 45	2,008 66	66 00	40 00	1,712 50	3,617 45
Buildings	2,419 91	5,710 24	2,373 07	2,415 19	2,204 45	1,361 30	1,837 09	1,710 24	2,569 77	1,821 22
Grounds	759 95	771 65	1,039 31	1,338 20	1,230 01	1,133 15	1,281 42	1,538 66	1,414 67	1,034 65
Chemical laboratory	120 28	1,925 24	22 10	199 33	37 00	100 00	21 94	100 00	452 64	597 01
Biological	2,015 30	1,005 12	3,833 17	1,248 98	709 64	580 97	477 09	299 65	420 46	361 71
Physical	243 50	1,089 94	223 37	78 00	4,022 38	2,678 16	1,077 35	2,281 49	639 35	43 88
Geological museum	33 07		34 72	319 85		8 34				
Ethnological						7 40	13 80		2 90	
Stationery, University	897 65	506 01	577 75	393 87	511 20	291 02	430 64	417 91	412 42	327 20
Printing	2,724 63	1,679 30	1,777 23	1,513 30	2,006 20	1,237 29	1,498 77	1,332 41	1,443 78	1,775 57
Sundries	39 33		109 25							
Advertising	36 60	78 50	111 37	102 70	32 64	67 50	82 75	77 75	56 70	88 84
Incidentals	161 70	67 00	45 30	138 58	111 74	133 94	124 08	122 50	129 51	157 38
Prizes			20 00	68 45	99 16	340 18	316 66	394 76	314 60	300 71
Prizes, University College	45 62	15 00		21 00	300 00	375 00	362 50	360 00	305 25	327 50
Stationery	88 76	105 78	73 40	41 32	157 11	808 34	91 60	66 73	194 18	165 28
Printing	184 00	186 25	160 30	244 85	75 35	680 38	500 60	249 15		223 20
Advertising	19 80	67 50	63 91	14 69	14 50	33 00	85 30	41 50	16 00	29 00
Incidentals	24 02	39 00	41 00	25 16	67 90	8 00	2 50		19 87	79 51
	84,746 18	85,111 62	78,332 12	70,149 82	74,701 24	23,440 41	69,585 72	69,726 39	66,384 85	69,218 86
Set aside for contingent fund	5,000 00	2,500 00	2,500 00		5,000 00	2,500 00	2,500 00			

SALARIES, ETC.

ACCOUNT.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Salaries exclusive of Bursar's office and including rent of President's house	55,825 34	54,082 00	50,902 49	44,607 68	43,332 66	43,022 66	43,197 65	40,143 44	37,124 14	35,970 89
Pensions, including gratuity to W. D. Pearman.....	1,240 00	740 00	180 50	2,666 00	3,306 00	3,306 00	3,306 00	4,706 01	5,260 19	6,657 66
	57,065 34	54,772 00	51,082 99	47,273 68	46,638 66	46,328 61	46,503 65	44,849 45	42,384 33	42,628 55

GENERAL EXPENSES.

Scholarships	790 00	2,743 34	2,956 64	2,840 00	4,465 01	4,054 99	4,255 00	4,713 34	3,895 00	4,275 00
Examiners	5,839 66	4,544 81	3,603 32	3,771 01	3,028 60	2,814 09	3,922 30	3,071 56	2,598 95	2,376 32
Library	2,766 61	2,502 45	2,678 24	2,556 35	2,719 36	2,589 38	2,594 46	2,613 77	2,734 45	2,498 46
Fuel	1,945 00	1,807 40	1,741 64	1,668 47	1,436 25	1,692 20	1,592 73	1,737 85	1,325 00	1,721 00
Water and gas	5,555 24	490 05	387 39	493 91	305 65	378 57	192 28	427 74	418 20	328 62
Telephones	95 00	8 00	97 50	115 00	115 00	115 00	115 00	115 00	53 91	.....
Insurances	831 00	350 00	1,640 04	50 16	.....	2,008 66	66 00	40 00	1,712 50	80 00
	12,822 51	12,518 05	13,104 77	11,094 90	12,069 87	13,652 89	11,737 77	12,724 26	12,738 01	11,279 90

BUILDINGS AND GROUNDS: MAINTENANCE, FURNITURE, REPAIRS, ETC.

Buildings, etc., (See Note "B")	2,419 91	5,710 24	2,373 07	2,415 19	2,264 45	1,361 30	1,837 09	1,719 24	2,569 77	3,617 45
Grounds.....	759 95	771 65	1,039 81	1,338 20	1,280 01	1,133 15	1,281 42	1,588 66	1,414 67	1,821 22
	3,179 86	6,481 89	3,412 88	3,753 39	3,434 46	2,484 45	3,118 51	3,307 90	3,984 44	5,438 67

2
(D.)

ACCOUNTS.	1890.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Chemical laboratory, (See Note "C")	120 28	1,925 24	22 10	199 33	37 00	100 00	21 94	100 00	452 64	1,634 65
Biological " (See Note "D")	2,015 30	1,005 12	3,833 17	1,248 98	709 64	580 97	477 09	299 65	420 46	597 01
Physical " (See Note "E")	243 50	1,089 94	229 37	78 00	4,022 38	2,678 16	845 90	2,281 49	639 35	361 71
Geological museum	33 07	.....	34 72	319 35	.....	8 34	.....	.....	.....	42 88
Ethnological "	.....	.....	.....	.....	.....	7 40	13 80	.....	2 90	.....
	2,412 15	4,020 30	4,119 36	1,846 16	4,769 02	3,374 87	1,358 73	2,681 14	1,515 35	2,636 25

SPECIAL EXPENSES—UNIVERSITY.

Stationery	897 65	506 01	577 75	393 87	511 20	291 02	430 54	417 91	412 42	327 20
Printing	2,724 63	1,679 30	1,777 23	1,613 30	2,006 13	1,237 29	1,428 77	1,332 41	1,443 78	1,775 57
Sundries	30 33	.....	109 25	.....	.....	.....	.....	.....	.....	.....
Advertising	36 60	78 50	111 37	102 70	32 64	67 50	32 75	77 75	56 70	88 84
Incidentals	161 70	67 00	45 80	138 58	1,111 74	133 94	124 08	122 50	129 51	157 38
Prizes	.....	.....	20 00	63 45	99 16	340 08	316 66	394 76	314 60	300 71
	3,850 91	2,330 81	2,640 90	2,316 90	2,760 87	2,069 83	2,382 80	3,345 33	2,367 01	2,649 70

SPECIAL EXPENSES—UNIVERSITY COLLEGE.

Prizes, U. C.	45 62	15 00	.....	21 00	300 00	375 00	362 50	360 00	305 25	327 50
Stationery	88 76	105 78	73 40	41 32	157 11	308 34	91 60	66 73	194 18	165 28
Printing	184 00	186 25	160 30	244 85	75 35	680 38	500 60	249 15	.....	223 20
Advertising	19 50	67 50	63 91	14 50	14 50	33 00	35 30	41 50	16 00	29 00
Incidentals	24 03	39 00	41 00	25 16	67 90	8 00	2 50	.....	19 87	79 51
	361 91	413 53	338 61	247 02	614 86	1,404 72	1,042 50	717 38	535 30	824 49

SUNDRIES.

ACCOUNT.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
Contingent fund	\$ c. 5,000 00	\$ c. 2,500 00	\$ c. 2,500 00	\$ c.	\$ c. 5,000 00	\$ c. 2,500 00	\$ c. 2,500 00	\$ c.	\$ c.	\$ c.
EXPENSES <i>re</i> INVESTMENTS, ETC. Note "A."										
General incidentals	307 25	101 98	195 84	88 50	6 50	172 50	44 44	89 90	205 09	132 14
Plans for Minister .....	.....	.....	.....	.....	.....	.....	.....	50 00	.....	.....
Arbitration <i>re</i> Victoria College .....	.....	80 00	.....	.....	.....	.....	.....	.....	.....	.....
Commission on loans	191 00	467 45	439 00	199 25	1,204 12	995 63	201 25	203 50	318 85	993 50
Law costs	488 45	415 03	39 20	88 75	118 39	91 17	71 69	118 21	224 22	190 22
Insurances <i>re</i> mortgages	Cr. 108 38	31 67	Cr. 72 67	194 81	194 81	30 33	111 76	25	.....	7 00
	986 70	1,096 13	674 04	568 53	1,523 82	1,289 63	429 13	461 86	748 16	1,322 86
BUILDINGS—MAINTENANCE, FURNITURE, REPAIRS, ETC. Note "B."										
Buildings	1,743 91	1,951 44	1,231 15	2,170 19	2,029 52	1,162 00	1,299 72	918 40	1,574 30	2,022 45
(Oak flooring) .....	.....	.....	.....	.....	.....	.....	.....	.....	523 99	.....
Covering steam pipes	361 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lecture room alterations	325 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
New water-closets .....	.....	3,369 71	503 22	.....	.....	147 40	537 37	.....	.....	.....
Drains, water-closets, etc .....	.....	.....	245 50	.....	.....	.....	.....	.....	.....	.....
Heating apparatus .....	.....	.....	.....	.....	.....	.....	.....	444 00	.....	.....
Convocation Hall windows .....	.....	.....	.....	.....	.....	.....	.....	76 58	.....	.....
Observatory cottages .....	.....	389 09	38 60	245 00	274 93	51 90	.....	280 28	471 48	763 14
Special repairs .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	200 00
Lecture room .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	279 99
Gymnasium .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	265 00
Dean's residence .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67 87
Plans for President's house .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gas, Convocation Hall .....	.....	.....	354 60	.....	.....	.....	.....	.....	.....	.....
Furniture for examinations .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2,419 91	5,710 24	2,373 07	2,415 19	2,204 45	1,361 30	1,837 09	1,719 24	2,569 77	2,617 45

CHEMICAL LABORATORY.

Note "C."

ACCOUNT.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Chemical lecture materials	41 25	93 59	22 10	199 33	.....	100 00	21 94	100 00	76 06	.....
Chemical laboratory apparatus	79 03	1,831 65	.....	.....	37 00	.....	.....	.....	376 58	1,634 65
Chemical students' apparatus .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	120 28	1,925 24	22 10	199 33	37 00	100 00	21 94	100 00	452 64	1,634 65

BIOLOGICAL LABORATORY.

Note "D."

Maintenance, museum, etc.....	1,262 84	204 29	3,833 17	1,248 98	709 64	580 97	477 39	299 65	420 46	597 01
Outfit	466 76	.....	.....	.....	.....	.....	.....	.....	.....	.....
Opening expenses	285 70	.....	.....	.....	.....	.....	.....	.....	.....	.....
Students' fund .....	.....	350 00	.....	.....	.....	.....	.....	.....	.....	.....
Lockers .....	.....	450 83	.....	.....	.....	.....	.....	.....	.....	.....
	2,015 30	1,006 12	3,833 17	1,248 98	709 64	580 97	477 09	299 65	420 46	597 01

PHYSICAL LABORATORY.

Note "E."

Maintenance	243 50	260 72	229 37	78 00	522 38	221 94	299 90	247 36	639 35	361 71
Electrical laboratory .....	.....	829 22	.....	.....	.....	.....	.....	.....	.....	.....
Electrical apparatus .....	.....	.....	.....	.....	3,500 00	2,000 00	.....	.....	.....	.....
School of practical science .....	.....	.....	.....	.....	.....	454 00	231 45	.....	.....	.....
Optical room .....	.....	.....	.....	.....	.....	.....	546 00	.....	.....	.....
Alterations .....	.....	.....	.....	.....	.....	.....	.....	2,034 13	.....	.....
	243 50	1,089 94	229 37	78 00	4,022 38	2,575 94	1,077 35	2,281 49	639 35	361 71

EXPECTATIONS.

It is estimated that the expenditure for the current year will be about \$92,000, so closely approaching the income as to render it impossible to apply to the contingent fund more than about \$1,500 out of the \$5,000 appropriated to that object.

For 1892 the expenditure on the present scale will be increased by the balance of the salary of the Professor of Ethics (\$2,000), and by sums for the full year's salary of officers appointed during the current year; and by a large sum for insurance on the building, two-thirds of which, however, will properly be chargeable to the succeeding two years, and by some items of maintenance.

It is conjectured that these increases will bring the expenditure for the financial year 1892, on the present scale, up to about \$95,000, as against a conjectured income of \$106,000, which would leave a surplus of \$11,000 without providing for an appropriation for the contingent fund.

And it is with reference to this conjecture that the financial schemes for the immediate future should be based. A few months will give some indication as to its accuracy.

It will, however, be seen that if the University can, as it is hoped, make sales of its choice property to the amount of \$200,000 a year for the next two or three years, or to the extent of (say) half a million of money, producing \$25,000 a year, its position will be one of comparative ease; and that a much smaller result would remove all financial difficulty in the way of executing the proposals of this report. In this view account is not, as it otherwise ought to be, taken of the fact that two or three years hence the item of maintenance will be increased by the occupation of the projected buildings.

REMARKS ON TABLES OF INCOME AND EXPENDITURE.

These tables show an increase amounting in ten years to about \$20,000 in the charge for salaries; an increase rendered possible only by the following facts:—

Diminution of Charge.

(1) The charge for pensions, which reached \$5,260 in 1882, has sunk for the time to a very low point; making a temporary saving of about.....	\$4,000
(2) The charge for scholarships, amounting in 1883 to \$4,718, has been, so far as the University is concerned, abolished, the present item of \$790 representing the proceeds of private endowments; making a saving of (say)	4,500
Total diminution of charge.....	\$8,500

Increase of Receipts.

(3) The fees have been doubled in amount and largely increased in volume, having risen from \$6,578 in 1882 to \$17,515 in 1890, which, however, included \$692 properly belonging to the previous year, thus reducing the true receipt to \$16,842, and showing an increase in gross fees (which of course is not net profit) of over.....	\$10,000
(4) The settlement with the city provides a yearly sum of	6,000
Increase of receipts.....	16,000
Total diminution of charge and increase of gross receipts.....	\$24,500

Therefore the enlarged expenditure for salaries has not been rendered possible by any considerable expansion in the revenue from endowment; and the forecasts of the report of 1882, elsewhere referred to, have been in this regard verified; the reduction in the current rate of interest having had its effect in this as in other like cases.

SCHOLARSHIPS.

As to the expenditure for scholarships, while doubt has been thrown on the utility of such expenditures under certain conditions, it is yet conceived that the establishment of moderate bursaries in connection with the matriculation examinations is plainly justifiable and expedient.

Nor must it be forgotten that competing universities provide such scholarships and also free tuitions to a very large extent.

Instances are reported in which good men, desirous to join the Provincial University, have been, since the withdrawal of our scholarships, obliged to go elsewhere in pursuit of these aids, which are so important in the frequent cases of students of narrow means.

It is of the greatest importance that the Provincial University should retain in the ranks of its students the best and brightest minds of the Province. The influence of such men is felt in the elevation of the standard of study and of culture through the whole body ; it reacts favorably on the pass-men ; it leavens the mass.

Again, the prestige and usefulness of the University is affected by the position taken in the world by the sons it sends out into the battle of life.

On all grounds, therefore, we must have regard to the bearings of this question.

It is not proposed at this time to recommend an alteration in the law which prevents expenditures on scholarships.

But it is thought right to bring the subject prominently into view, and to suggest that it remain open for consideration in the future ; that in the meantime the attention of the friends of the University be specially directed to this channel for their liberality ; and that every encouragement be given, by the establishment of free tuitions in connection with scholarships, by further legislative facilities, and otherwise, to the plans of those who may endow them.

PART III

Buildings.

MAIN BUILDING RECONSTRUCTION.—PROPOSED LIBRARY BUILDING ; AND BOOKS.—MUSEUM SPECIMENS, ETC.—GENERAL FINANCIAL RESULTS.—BIOLOGICAL LABORATORY : EVIDENCE AND RECOMMENDATIONS.—BIOLOGICAL MUSEUM ADDITION : EVIDENCE AND RECOMMENDATIONS.—CHEMISTRY : EVIDENCE AND RECOMMENDATIONS.—GYMNASIUM AND STUDENTS' UNION : RECOMMENDATION.—RESIDENCE : EVIDENCE AND RECOMMENDATION.—CONVOCAION HALL : RECOMMENDATION.—GENERAL FINANCIAL RESULTS.—FINANCIAL SCHEME.

·MAIN BUILDINGS.

The resources available for the restoration and reconstruction of the main building in part destroyed by fire on February 15th, 1890, comprise :—

Insurance.....	\$ 90,000
Public grant.....	160,000
In all.....	<u>\$250,000</u>

In remodelling the interior, regard was had to the present and prospective needs of the institution ; to the increased and increasing numbers of students, male and female ; and to the enlarged curriculum.

The space available has been devoted to meet these needs, and will adequately supply them for a considerable period, in the departments served by this building.

It became necessary to use for examination rooms the spaces of the old Library and Museum, and for lecture rooms and like purposes the space of the old convocation hall.

Every effort has been made to produce the best results at the least cost, and it is hoped that the work may be finished for a sum slightly within the amount named, without, however, providing for the replacement of the library and convocation hall, to which, of course, any surplus would be applicable. The contracts provide for completion in October. It is thought that the work will be, to a large extent, then finished.

THE LIBRARY BUILDING.

The liberality of friends of the University, including the sister Province of Quebec, has provided a building fund of \$62,000, which it has been decided to devote to the erection of a library building on the modern principles of a stack room and the seminary system.

The greatest pains have been taken to secure a satisfactory design, and the working plans are now being prepared.

The approximate estimate of cost is \$65,000, so that this important building will be provided almost free of cost to the University.

LIBRARY BOOKS.

It is very gratifying to report our condition and prospects as to books.

This loss it was which moved our friends at home and abroad more than any other incident in our misfortune.

Our insurance is \$50,000.

Subscriptions have been made to over \$42,500, of which over \$16,000 has been paid.

The balance is payable by instalments spread over several years, and though there will, of course, be some shrinkage, it is expected to produce a very large sum.

We have also received up to this date as presents 26,622 volumes of a very high average value.

It is expected that with these liberal aids the library can, by means of the subscriptions, be put in a condition of fair efficiency; and it is proposed to convert the insurance money into a permanent library fund to be devoted exclusively to the increase of the books.

MUSEUM SPECIMENS.

Archæological, Mineralogical, Biological.

Our insurance on these was \$8,000.

It is hoped that a public appeal, as soon as the new museum is opened, will produce a considerable number of specimens, to be supplemented by purchases out of the insurance money, which should be devoted to this object. Liberal promises have been made and some valuable gifts have already reached us.

FURNITURE.

Our insurance on this was \$4,000.

GENERAL RESULT.

The general result of the foregoing details is as follows :—

(1) After the fire our resources were—

Insurance on building.....	\$ 90,000	
Insurance on books.....	50,000	
Insurance on various museum specimens.....	8,000	
Insurance on furniture and scientific apparatus.....	4,934	
		<hr/> \$152,934

We have received or been promised—

Legislative grant.....	\$160,000	
Subscriptions to building (devoted to library building)....	62,000	
Subscriptions to library books.....	42,000	264,000
		<hr/>

Grand total \$416,934

Besides presents of books, 26,622 volumes.

With these resources we are enabled to restore the main building, improved so as to meet our altered needs ; to replace the furniture ; to build a new library, with seminary rooms ; to provide a fairly efficient library of books, and a permanent book fund ; and to restore, to a large extent, the museum specimens.

All this will be accomplished practically without trenching on the University endowment.

BUILDINGS FOR DEPARTMENT OF BIOLOGY.

The funds for the laboratory building costing (with \$466,76 for outfit) \$57,126.54, have been provided as follows :—

Out of surplus income.....	\$24,965 77
Advanced out of endowment.....	32,166 77
	<hr/> \$57,126 54

The recommendation of the Board of trustees was that the \$30,000 allowed by the government to the University in respect of the old park buildings should be devoted to this object, which application would now leave to be provided for only \$2,166 77, which was to be advanced out of capital and recouped out of surplus income.

The Order-in-Council, however, stated, perhaps inadvertently, that the recommendation of the Board was that the balance required, over and above \$15,500 then available from surplus income, should be taken out of capital, and that the amount should be recouped out of income, and it adopted this assumed recommendation.

The \$30,000 referred to has been put to the credit of the endowment fund.

In the present state of the income fund and of the demands thereon it becomes necessary to adjust this balance ; and an advantageous plan for doing so, and for settling the cost of the museum addition to this building, and of other needed buildings, forms part of this report.

The estimated cost of the museum addition is \$65,000, the payments thereon, amounting up to April 18th to \$54,329.28, have been made out of the capital of the endowment ; and it is proper to provide for the adjustment thereof, as well as for the erection of further necessary buildings.

As part of the museum building, and with a view to provide fully for the future expansion of the department, and to afford the amplest facilities for the study of all the subjects on the curriculum, lecture-rooms and accommodations have been provided suitable for the study of human anatomy and physiology.

The evidence on this subject is as follows:—

I. (Abstract of memorial by Dr. Macallum on the study of human anatomy.)

Cambridge (England) University. (Only examination papers accessible.)

In the natural science tripos the student is required to take human anatomy, both descriptive and practical, in his biological course. Every paper in this course contained from one to three difficult questions in human anatomy, 1887-9, and the student was compelled to show that he could dissect out any part of the body required in such a manner as to satisfy the examiners that he was a good dissector. In 1887-8 there were three questions on human anatomy on every paper (6 in number) in Part I., and there was in addition a paper on practical human anatomy. In Part II. from two to three questions (difficult ones) on human anatomy were on every paper in biology, with a paper on practical human anatomy. In 1888-9 the same is true of Part I.; in Part II. there were four examination papers on human anatomy alone in the biological course, with one paper on practical anatomy. The biological course in Cambridge is not a fuller one than in the University, except in this respect. The human body is the best subject on which the biological student can gain his accurate habits of dissection and his thorough knowledge of vertebrate anatomy, which is necessary to a good biologist, zoologist and physiologist. In this respect the Cambridge University authorities are wise, and the result is that the Cambridge school of biologists occupies an advanced position.

The dissecting room is on the University ground and very near the biological laboratory.

Melbourne, Colony of Victoria (Australia).

The degrees of this institution are esteemed almost as highly as those of the Universities of London, Cambridge and Oxford. It is only recently that the governing body has filled the chairs in the science and medical faculties, and therefore a full curriculum in these departments has not been made out. They have the buildings of the medical department, including the dissecting room, situated on the University grounds, within a stone's throw of the arts building.

This University is supported and endowed by the Government of the colony.

Edinburgh and Glasgow.

The dissecting rooms are in the wings of the main University buildings. In Edinburgh the dissecting room fronts George Square.

University College, London.

The dissecting room is here also in the main building, adjacent to chemical and physiological laboratories. As this college is not empowered to grant degrees its course of study is adapted to the needs of the student and the University examinations he proposes to take.

Yale.

In the course on comparative anatomy a series of lectures on embryology is delivered with special reference to human morphology (human anatomy), and this is compulsory on the students in biology. (Calendar, p. 130.)

University of Pennsylvania—School of Biology.

In this laboratory the student is required in the advanced course to undertake the minute dissection of a mammal, which is generally represented by the cat. In the "Handbook of Information concerning the School of Biology" there is a sort of apology

for this choice. The directors (p. 95) say : " It is not necessary to dwell on the importance to the general student of a knowledge of his own body, or on the value of such careful work upon one type to the student who intends to devote himself to more advanced work in the future." The reason doubtless for the choice made (the cat instead of human subject) is no doubt the distance between the school of biology building and the medical building

McGill College.

There is no course in biology in this institution, and comparable to that in the arts course of the University of Toronto.

The dissecting room is in the medical building round the corner of the main University building.

Johns Hopkins University, Baltimore

There is a full course on human osteology (structure of the skeleton) given by Dr. Brooks, Associate Professor of animal morphology, which is compulsory on the students of the biological department. The dissecting room is at considerable distance from the biological laboratory, and it is probably on this account that the biological student is not required to study the anatomy of the soft part of the human body. There is a course, however, for the biological students, in which the main facts of human anatomy are taught and demonstrated, and a course of lectures is given in the same line and like that followed by the professor of the department, Dr. Martin, in his " Human Body."

University of Toronto.

The curriculum requires of the pass arts student, under the head of biology, a course in the elements of human anatomy and physiology. Demonstrations are given in the subject of physiology, but except in the structure, etc., of bones (osteology) there are no demonstrations in anatomy.

In the fourth year honor biology, human anatomy (in connection with comparative anatomy) is one of the subjects a knowledge of which is exacted of the student, but owing to the great distance between the dissecting room of the medical faculty and the biological laboratory, there is a great waste of time in going to and from the former. As the average student must, in order to give himself a practical acquaintance with the other subjects of the biological course, spend over 600 hours in the laboratory—the curriculum demands 400, but that will not give the student the practical insight he requires into these subjects unless he be excessively energetic—he can, therefore, in 100 days have little spare time for anything else. In spite of this drawback half of the number of fourth year students are taking the dissecting course in the dissecting room of the medical faculty.

2. Dr. Macallum, by letter dated 7th April, 1891, expresses regret at the absence of Professor Ramsay Wright at this juncture and his hesitation in advancing himself as spokesman of the department, and encloses a *resumé* of his arguments in favor of requiring a knowledge of human anatomy from the students in the arts faculty who are taking the honor natural science course, as follows :—

(1) In the pass course of the first year in arts there is required the knowledge of the elements of human anatomy and physiology. These two subjects are, admittedly, of a useful character to a student who takes biology once only during his undergraduate course. Whatever can be said in this respect for the pass student applies with greater force to the student taking the honor natural science course. The latter is required to have a practical acquaintance with the comparative anatomy of vertebrates, the general type of structure running through all the vertebrates; and comparison is possible on the part of the student, only when he knows the anatomy of one or more vertebrate forms thoroughly. In no one form is the structure so carefully worked out as in the

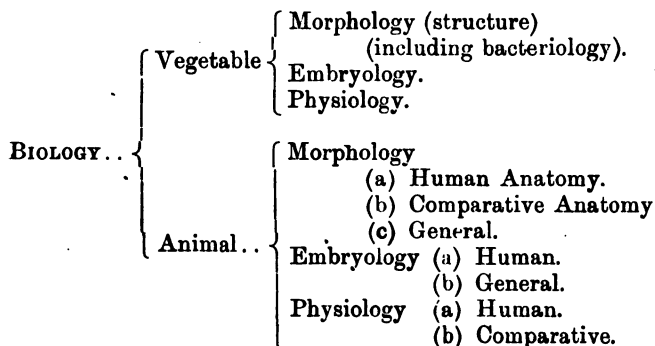
human subject, and about no other form is there obtainable in text-book shape the knowledge necessary to serve as a basis for comparison. It is only when a student is fairly well acquainted with human anatomy that he is capable of appreciating the bearings of comparative observations. From this point of view, then, human anatomy ought to be studied by the students of the honor biological course. Professor Wright holds, I know, similar views as to the relations of anatomy to his subject. The great difficulty in the way of carrying out such views has been and is the long distance between the dissecting room and the biological laboratory, and the consequently great loss of time to the student in passing between the two places. Because of this we have not done more than to recommend the fourth year biological students to take a course of dissection of the human subject. Some of them have, indeed, taken a partial course in the same this year.

(2) It may be stated that human anatomy is not a proper subject for an arts course. Regarded from the view of sentiment and, possibly, custom, probably not; yet whatever can be said in this respect against its place in the arts course may be said with apparently equal force against considering physiology as a subject of the arts course. The latter, however, passes unquestioned in the majority of the English and in the best American universities, while it is considered as a medical subject, and arbitrarily separated from biology, in the German universities.

(3) The University of Toronto in regard to its honor biological course approaches more nearly the University of Cambridge than it does any other university (with the exception perhaps of that of London.) In Cambridge a theoretical knowledge of human anatomy, and a course of dissection of the human subject are required in every one of the examinations of the natural science tripos leading to the B. A. degree. I may also add that the thoroughness of the examinations in this subject for the B. A. degree far surpasses that of the examinations for the medical student even in the University of London. As a result, I believe, of this thoroughness, the graduate of the biological course in Cambridge is more carefully trained and carries more of his training into his subsequent scientific work than is and does the graduate of a similar course in any other university.

From the very fact that it is among the leading biological schools of the world, if it is not itself the foremost one, it appears safe to say that the most progressive teachers in biology regard human anatomy as much within the domain of their subject as the anatomy of a fish or of an insect.

(4) Human anatomy, taught as it is in Cambridge, is a science, not a subject merely for qualification for the medical profession, and as a science it is taught in Oxford, Owens, Dublin, and other universities. As a science it takes its place beside physiology, botany, and zoology, as a sub-department of biology. Probably a scheme, such as that given below, may show its relations to the other subjects of the biological course, and it may make clear the necessity of cultivating, on the part of the honor biological students, the study of one as much as of the other :



Recommendation.

It is expected that the number of arts students taking the indicated studies will shortly increase ; but at first they will be very few. The great bulk of the students who would most directly profit by the accommodations, in the first instance, would naturally be those preparing for medicine ; and it would not be proper at present to propose University provision for tuition.

The public is deeply interested in the provision of facilities for efficient training in these subjects, as also in that of bacteriology, the modern discoveries in which have opened such vast and important fields of inquiry and research in the direction of the origin and prevention of disease ; and it would seem that facilities in some of the subjects may be afforded without material cost to the state, by allowing a certain use, meanwhile, of some of the accommodations of this building to the students preparing for medicine, on condition that the arts students in biology shall obtain on equal terms the benefit of the instruction ; that the arts department shall enjoy such use of the premises as is requisite, and that the University shall provide, out of the forty per cent. reserved from the medical fees for running expenses, an adequate allowance for the accommodation.

The temporary use proposed is of the attics, and the occupation for two hours per day of the lecture room, and some basement accommodations ; and it is proposed that for such use an allowance should be made to the University, based on the cost of that part of the building, calculating interest at 4 per cent., the rate of charge as hereafter set out.

We are satisfied that \$1,200 per annum would be a just and adequate allowance on this basis.

The expense of maintenance and repairs should be borne in like proportion.

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DEPARTMENT OF CHEMISTRY.

The evidence as to the needs of this department is as follows :

1. November 7th, 1890.

Letter from Professor Pike to the Senate, stating that this term, notwithstanding an increase in the number of working places in the laboratory, there remain excluded 15 students for whom no provision can be made, and that a new chemical laboratory should be immediately constructed ; also, stating that the large number of lectures to be given by the professor, requiring time for preparation, prevent his taking any real share in the practical instructions, and that the whole practical work falls on a necessarily inexperienced Fellow, who is called on to teach more students simultaneously than the most experienced teacher could possibly do ; and that there is an outspoken feeling of discontent among the students ; and pressing the appointment of a demonstrator of chemistry who can superintend the practical instruction, and assist the professor by undertaking some of the lectures.

2. Letter from Professor Pike to the registrar, for the information of the Senate Committee, giving further details on the above subjects, stating that the time required for the delivery and preparation of his two experimental lectures per day takes, in all, about four hours ; that during the lecture to one class the others are receiving their laboratory tuition, and that in consequence the professor cannot take any real share in the practical teaching ; further, that the fellow has to take charge of the laboratory every day of the week from 10 a.m. to 6 p.m., has to superintend a class of 49, 41 simultaneously, of whom 40 have never been before in a laboratory ; and renewing his request for the appointment of a demonstrator ; and suggesting a salary such as is paid to the demonstrator of physics.

3. The report of the above Senate Committee, recommending the appointment of a demonstrator at a salary of \$800.*

4. The resolution of the Senate, recommending the appointment of a demonstrator, for which appointment the Board of trustees have appropriated \$400, being at the rate of \$800 per year.

5. Memo. from Professor Pike, for the information of the above committee, as to the requirements of the department, based on two assumptions :

(1) On the assumption that only students in arts are to be provided for, in which case Professor Pike requires

(a) A laboratory to teach 100 students, with lecture rooms.

(1) for 150 students,

(2) for 50 students ;

(b) A demonstrator of chemistry as above mentioned.

(2) On the assumption that the department is to undertake the whole of the tuition in the faculties of arts and medicine, and elementary classes of the School of science, lectures only, he requires

(a) a laboratory large enough to teach 200 students practical chemistry, with lecture rooms for 300 and 100 students ;

(b) Besides the proposed demonstrator above mentioned, a demonstrator for the medical students, and a Fellow for them.

Professor Pike states that at present the students attending his lectures are :—

Arts.

Chemistry, 1st year pass and honor	49	
“ 2nd, 3rd, and 4th years, honor	49	
Department of physics and mathematics.....	15	
	—	113

School of Science.

Applied chemistry	3	
Engineers, 2nd year	23	
	—	26

(To be increased to 47 next year.)

Medicine.

1st year	84	
2nd year	74	
	—	158
Total.....		297

And that the students taking laboratory work, arts only, are registered up to 64, of whom 15 are excluded for want of room and of tuition. Professor Pike adds that all the medical and school of science students receive their instruction in practical chemistry from the school of science and not in the University laboratory.

6. January 14th, 1891.

Letter from Professor Pike to the registrar as to the work done in his department,

*NOTE.—The present salary of the Demonstrator in Physics is \$1,500. His initial salary was \$1,200.

and the causes of his declining to continue lecturing to the medical students ; that his present work consists of lectures delivered by him, and of laboratory practice, which Dr. W. L. Miller looks after, under his supervision.

That his present lectures per week are :—

- 2 inorganic (arts, medicine, and School of Science),
- 2 advanced (do do),
- 2 elementary organic (medicals only),
- 3 organic (arts only),
- 1 special lecture to 2nd year chemical and mineralogical students.

—
10 in all.

That he is hard at work every day from 10 a.m. to 6.30 p.m., with not more than half an hour for lunch.

That six of the lectures are to large audiences, requiring a loud tone ; and that the continuous talking in lecture-room and laboratory has so weakened his throat that even had he time he could not deliver a third lecture.

That, save one lecture to the second year men, none are given to the students in chemistry and mineralogy.

That no lectures at all are given to the 4th year men.

That the consequences are very apparent, and the effect on the students in the department in the earlier years is still worse.

That in the third year the tuition is identical with that given to the students in the natural science department, and the consequence is that the men know very little more than the natural science men who are required in addition to chemistry to pass examinations in biology and geology.

That these defects have become so glaring that it would be inconsistent with his duty to continue to deliver to medical students special lectures, the delivery of which prevents any attention to the students in arts who are to graduate in chemistry.

And that he would like an opportunity to explain in detail the work, and the absolute need of some re-arrangement of the teaching.

7. January 8th, 1891.

Report of the Senate committee appointed to consider the question of new buildings for the departments of chemistry, mineralogy and geology.

That there is a very pressing need of increased and more suitable accommodation for these departments.

That plans and statements of the necessary accommodation, as submitted to the architect by the professors, are estimated to require for chemistry from \$75,000 to \$100,000, and for mineralogy and geology \$40,000, but it is thought that these sums may be materially reduced.

That, should an arrangement be made with the Ontario Government to pay a rent charge for the ground occupied by the School of Science after the departments cease to use the building, the rent might be set against the interest on the cost of the proposed buildings,

And that the Ontario Government might be legitimately asked to meet part of the expense of providing the required accommodation, since students in the School of Practical Science receive instruction from the officers of the departments.

8. The Report of the Senate committee on teaching facilities, mentioned earlier, to the effect that the accommodation applied for by the professors in chemistry and mineralogy and geology is urgently required and should be provided, just as soon as the financial position of the University will admit.

Recommendation.

This evidence makes it clear that the present temporary arrangements are wholly inadequate, and should be changed as soon as practicable.

So far as can be conjectured, without detailed plans and estimates, the requisition of the professor would involve an expenditure (for a building adequate for the instruction of both students in arts and students in medicine) of \$100,000, of which possibly \$30,000 may be the amount required for students in medicine.

But it is thought that, by cutting down the size and the character of the materials and architecture to the lowest point consistent with true economy and efficiency, the cost may be reduced to (say) \$80,000, of which \$50,000 to \$60,000 would be the amount requisite for arts, and \$20,000 to \$30,000 the additional amount requisite for medicine.

Thus the extent of the building requirements depends on the question raised in the evidence, whether the students in medicine are to receive their instruction with the students in arts, under the supervision of the University Professor, or with those in the School of science, under the supervision of the professor of that School, who is also Professor of Chemistry in the medical faculty, and who now conducts the practical work.

It is suggested that the latter course is, for several reasons appearing in the evidence, and on the ground of economy, as to buildings, in the present condition of the University funds, the more advantageous; and the existing accommodations of the School of science under the proposed re-arrangement will be ample.¹

If this view be adopted an agreement should be made under which the University should, out of the 40 per cent. of the medical fees reserved for running expenses, provide for any extra expense attending the tuition of the medical students.

This done, the building needs of the department will be limited by the requirements for students in arts.

To answer these requirements it is proposed to erect a plain brick building; and it is obvious that that this work is most urgent, and that plans should be obtained and the work put under contract the moment the necessary financial arrangements can be made.

DEPARTMENT OF MINERALOGY AND GEOLOGY.

The evidence as to the needs of this department is as follows :—

(1) November 5th, 1890.—Letter from Professor Chapman to the Registrar for the Senate Committee stating :—

(a) That apart from the need of an attendant, since provided for, no additional assistance as regards tuition is at present needed.

(b) As to accommodation, that the present accommodation is utterly insufficient, and is otherwise quite unsuitable, being in great part underground among coal cellars and water closets, unsanitary, damp, and ill-ventilated.

(2) November 10th, 1890.—Letter from Professor Chapman giving details of the required accommodation as follows :—

(1) Laboratory for second year students in arts with fittings for fifty or sixty at least.

- (2) Ditto, for third year arts, fitted for thirty to forty at least ; which might serve also for Fellow's room.
- (3) Private laboratory adjoining, which might also serve for professor's room.
- (4) Assaying room fitted for eight to ten students at least.
- (5) Adjoining balance room.
- (6) Small room for use of instruments, etc., for fourth year students.
- (7) Store room for crucibles, muffles, and test minerals in practical use.
- (8) Well-lighted room near lecture room (10) to hold a working collection of minerals, works, and fossils, for constant inspection.
- (9) A well-lighted room to hang maps and prepare diagrams.
- (10) A lecture room for 150 students at least, near museum (12).
- (11) Additional instruments and apparatus, goniometers, stauoscopes, polariscopes, spectroscopes, gas-furnaces ; those now in use being obsolete and worn out.
- (12) A collection of minerals and fossils, the cost of which might be borne by the insurance on the late geological museum.

3. The report of the Senate Committee stated as number seven under the head of Chemistry.

4. The report of the Senate Committee stated as number eight under the head of Chemistry.

5. December 15th, 1890.—Letter from Professor Chapman stating that :—

(1) The present accommodation and appliances are utterly insufficient for the increasing number of students taking practical work. This compels several sub-divisions of the class of each year, necessitating repetitions by the Professor of the work ; thus each student obtains only one-half or one-fourth of the instruction he would otherwise receive.

(2) The rooms for the instruction are half underground, among cellars and water-closets, unhealthy and ill-ventilated. When the furnaces are lighted the rooms are overheated, the pipes for other parts of the building being carried through the rooms over the heads of the students ; at other times the rooms are excessively damp and cold. In spring and autumn iron rapidly rusts, and books and papers become wet.

(3) The only places for keeping and showing specimens constantly required to be studied, are a small passage-way and a cellar. Specimens and instruments have to be carried at almost every lecture up and down three flights of stairs, and along corridors ; and there is no room for students' work between lectures.

(4) Yet the department is regarded with great interest by the public, hardly a day passing without applications for information on matters connected with the Mineralogy and Geology of the Province ; thus, last October there were thirty-two such applications, and last November twenty-nine, all replied to without charge, in the interests of the University, by the Professor.

6. Professor Chapman by letter of 26th January, with reference to queries advanced at the meeting with the faculty, expresses the opinions :—

(1) That the teaching of the University and the School of Practical Science can be profitably combined, as regards his department, if there be provided a lecture room for

150 to 200 students, with separate laboratories for second year and third year students of the school and the University; but that, as the students increase in numbers, some additional assistance would be needed.

The chief drawback is that the School session ends before that of the University, thus interrupting, for the examination of the School students, the arts lectures, just when the arts students require additional instruction in view of their approaching examination; but additional assistance would meet this difficulty.

Additional assistance involves additional space. To be of real benefit, the mineralogical and assay laboratories, and the geological museum, should be open to students during the greater part of the day.

There is now but one laboratory for the work of the second and third year engineers, and the second, third and fourth year University students.

(2) As to temporary provisions for the next two years, he would willingly put up with any inconvenience and do his best to carry on the work meanwhile, if there were visible any near prospect of proper accommodation.

(3) As to the possibility of obtaining assistance from fees, he is strongly of opinion that many students are taking honor (*i.e.*, practical) work without any proper preliminary training or appreciation of the work itself. He thinks honor work in natural science should be undertaken only by students who have a special aptitude for it, and are prepared to get proper apparatus and books; but too many take up the work in a very careless and desultory manner, without any intention of continuing it, and even disposing of their instruments and books after the examination.

They come for a degree, and not for practical knowledge, and a tolerably high fee might tend to keep students of this kind from attempting work for which they are really unfitted.

Students of the second and third years pay a laboratory fee of \$1 and \$2, which there is always difficulty in collecting.

(4) As to the probable results of confederation :—

It will necessarily increase, and probably greatly increase, the number of science students.

And as the numbers are, apart from this, rapidly increasing, it will be utterly impossible to cope with the numbers with the present accommodation.

The subjects have so multiplied that no one subject will be able to receive more than one lecture or one practical lesson per week, a most undesirable condition for the student.

(5) The proper work of a University, as distinguished from School work, is as follows :—

(a) Lectures.

(b) Examinations based thereon.

(c) Any preliminary training or additional tuition required by students should be obtained from outside tutors.

(d) There should be ample opportunity for practical work, but this should not, as regards examinations, be compulsory, because no laboratory will accommodate more than a certain number of students, and hence, many desirous to enter will often have to wait for a vacancy.

'Honor' students have been manufactured to a most pernicious extent, at least in the scientific departments.

Nine-tenths, if not more, of the honor men in science, go out into the world, and after all the outlay involved in their tuition, do absolutely nothing to add to the reputation of the University.

Recommendation.

This department, so important to a province with the vast mineral resources of Ontario, suffers lamentably from the want of accommodation, and the provision of proper facilities for its work is of great consequence.

The present accommodations are temporary, inadequate, and unsuitable.

It is suggested that steps be forthwith taken to invite the co-operation of the Government with the University in the erection of a building which will be suitable for provincial purposes as well as for distinctive University work ; and failing such co-operation the erection or adaptation of a suitable building by the University is recommended.

GYMNASIUM.

This is a very urgent want for students, the greater part of whose attendance is during the inclement winter months.

A gymnasium under University control, in close proximity to the class rooms, and so available during intervals between lectures, is a very important part of a University plan, and should be provided at the earliest moment.

Shortly before the fire a subscription was started among the graduates and undergraduates for the purpose, and about \$3,000 is in hand.

But that great calamity, which obliged all those interested in the University to devote their means to restoration instead of improvement, has rendered it impossible to enlarge this fund.

It is proposed to erect a gymnasium with which may be combined rooms for a students union, and which may be made available as a temporary Convocation Hall, at a cost of about \$20,000, leaving the supply of the apparatus and fittings to subscription.

RESIDENCE.

This is an important element of the University. It is generally agreed in University circles that the residence should be preserved and fostered as one of the forces which make for good in the student life, and in the opinion of the Senate the extension of residence at an early date is a matter of urgent importance.

The new residence of Trinity is found very attractive, as will undoubtedly be the projected residence of Victoria.

Our dormitories are too few in number and antiquated in style.

There is at present dining-room and kitchen accommodation sufficient for a much larger number of residents than the dormitories will accommodate.

A plain brick building to the north of the present residence, containing dormitories for 100, could, it is believed, be completed for about \$20,000.

Subscriptions to the amount of \$1,000 are in hand for this object.

The residence can and should be made, in its enlarged form, self-sustaining, as is the present residence, and can and should also (the dormitories being rented at different rates, the new higher than the old) be made to pay the interest on the cost of the addition, so that its construction will involve no charge on the income fund. This work is recommended. Certain evidence is appended.

Professor Baker as dean of residence by letter of January 24th, 1891, reports the following facts and opinions :—

(a) The present dining-room accommodation is ample for 100 additional residents, and the kitchen, pantry, etc., are on the same scale as the dining-room. To employ these advantageously, it seems necessary that the increased room should be obtained by the erection of a building immediately to the north of the present west wing.

(b) In Yale and Harvard the "Halls" consist of separate houses, and this avoidance of a very long corridor appears best to contribute to discipline. In these institutions also, the rooms are in sets of three—a sitting-room with two bed-rooms attached, suitable for two students. This arrangement could hold, along with distinct rooms that might be let at a lower rate than half that at which the sets were rented.

(c) The erection of a building capable of lodging 100 would supply rooms for about one-third of our students, and such partial attempt to meet the interests of the institution would seem judicious in view of the experimental character of the undertaking.

(d) He has consulted Mr. Dick as to the cost of a building, such as is here roughly outlined, and he believes it could be put up for \$15,000 or \$16,000. His estimate can scarcely include steam-fitting and plumbing.

(e) To secure the use of the building by our students, it would be necessary to reduce the cost of board to \$3 a week (at present it is \$3.50), and to rent the rooms at, say \$2 a month. He is disposed to think that even at these rates the increased numbers would secure an economy of living, that would create a surplus to be used in payment of interest on the cost of the building.

CONVOCATION HALL.

Deeply as those who love the University regret the loss of the Convocation Hall, important as they regard it, and earnestly as they desire to see provision made for its erection, yet it is thought prudent in view of still more urgent needs to postpone the expenditure necessary for this object.

Some meeting place, however, there must be, and it is suggested, that pending the improvement of the resources of the University to be indicated in this report, the gymnasium may be utilized for the meetings of Convocation.

MONEY REQUIRED; FINANCE.

The general result as to the money to be provided for is as follows :—

Already Undertaken.

Balance of biological laboratory not provided for out of surplus income	\$32,167
Cost of biological museum addition	65,000
	<hr/> \$97,167

New Buildings Proposed.

Chemical building.....	\$60,000
Gymnasium, Union, and temporary Convocation and meeting room	20,000
Residence	20,000
	<hr/> \$100,000

Grand total	\$197,167
	say \$200,000.

To adjust this amount, the following plan is proposed :—

Legislative power exists under the University Act to issue debentures secured on University assets, to an amount not exceeding \$200,000 for the construction of buildings.

The nature and extent of these assets appear in this report. They are such as to render the suggested operation absolutely secure.

It is proposed that legislative authority should be obtained by the Government to give the provincial guaranty to twenty year debentures, at four per cent., which, it is believed, can then be issued at or above par. A parliamentary mortgage in favor of the Crown of the whole assets of the University now vested in the Crown would leave it absolutely secure; the Crown could recoup itself at an hour's notice, and the provincial institution would thus, without loss to the province, be enabled to proceed in its necessary work. The interest charge would be \$8,000 a year. But this sum would be reduced by the rental of part of the biological building, \$1,200, and the recoupment by the residence of the interest on the cost of addition, \$800, in all \$2,000, to \$6,000 a year.

And this balance would be further reduced by the allowance for ground rent which it is understood between the Minister of Education and the University is to be made for the site of the School of Practical Science, so soon as the University (availing itself of the new building) is able to discontinue its present occupation of that building for the Arts faculty in the department of chemistry.

Remembering that at the present time the balance advanced on the biological building entails a diminution of income (calculating interest at six per cent.) of \$5,820 a year, it is clear that the combined result of these arrangements would be to provide \$100,000 additional for buildings, not merely without additional expense for interest, but with an absolute saving of a considerable part of the present interest charge.

As to the capital, it appears by this report, that the realization of unproductive property will, long before the maturity of the debentures, provide for its repayment many times over, without interfering with the present investments, or reducing the present income.

There is, of course, the cost of maintenance to be considered; but against this may be set the increased attendance, and consequent increased receipts for fees, which experience shows follow increased accommodations.

Besides, it will be some time before maintenance charges begin, during which interval it is expected that the income fund will largely increase by sales.

PART IV.

Theoretical Arrangement of Offices.

ASSOCIATE PROFESSORS.—REPRESENTATION ON COUNCILS.—APPOINTMENTS AND PROMOTIONS.—SALARIES.—APPLICATION TO EXISTING STAFF.—RETIREMENT FUND.—APPLICATION OF REGULATIONS THEREFOR.—PROPOSAL FOR IMMEDIATE ACTION THEREON.—FINANCIAL RESULTS AND CASH OUTLAY.

In considering the recommendations to be made, it seems important to suggest a theoretical arrangement towards which we should work, and in that view a scheme is presented.

ASSOCIATE PROFESSORS.

The office of associate professor is recommended on various grounds. It provides means to meet a case in which a professor, through increasing years, becomes, though still capable of good work and not ripe for retirement, less able for full duty. It affords an opportunity for appointing or promoting to an intermediate grade in cases in which the interests of the University would be served by such promotion; but when, either from financial or other considerations, it is not thought that an appointment should be made to the office of professor. It provides a greater measure of elasticity, which may from time to time be found very useful in working out the details of management.

REPRESENTATION ON COUNCILS.

The recommendation is approved that every associate professor should have a seat, and that the executive should be empowered to appoint any lecturer to a seat on the

council of his faculty. And it may be added that the working of each of the faculties of arts, medicine and law would be facilitated by provision for stated conferences in council of all the members of such faculty.

APPOINTMENTS.

No appointment should be made until after a fair opportunity has been given to intending applicants to prefer their claims.

No office should be established, or chair filled, or permanent engagement made, until there are funds adequate to the salary properly assigned; experience shows the errors and inconveniences resulting from such premature appointments; and therefore, for example, it is recommended to postpone the creation or filling of professorships until the funds are available, and to provide for emergencies meanwhile by the temporary appointment of additional lecturers and Fellows.

PROMOTIONS.

The rule cannot be too clearly understood that the appointment to an office of lower grade involves no claim or expectation of a right to promotion to a higher place.

The man who is fit for the lower may be unfit for the higher work; the man of whom great expectations were entertained may fail to realize them; and the Executive must be absolutely free to choose the very best man available at the moment when the post is to be filled.

Advantages those already in the service will always have; the advantage of friendship and connection with colleagues and students; and the advantage of opportunity of showing on the spot by the work they have done, their capacity for higher work.

With these advantages all must submit to the rule *detur digniori*.

SALARIES.

It is thought that the best and most improving service can be obtained at the least outlay by the plan of lower initial salaries, increasing by regular increments.

It is not advisable to provide that the initial minimum shall be always necessarily observed, as this might on rare occasions render impossible desirable arrangements.

But it ought to be the rule.

The salaries to be suggested include the sums intended to be reserved for a retirement fund.

It is proposed that the educational staff in arts should be composed of officers of the following ranks and salaries:

Professors and Associate Professors.

Professors.—To be appointed at a minimum initial salary of \$2,500, increasing by yearly increments of \$100 to \$3,200.

Associate Professors.—Initial salary \$1,800, increasing as above to \$2,500.

Lecturers and Demonstrators.

Initial salary \$800, increasing as above to \$1,800.

Fellows.

Salary \$500.

This plan, of course, is not intended to apply to the exceptional cases of professors who give only a limited portion of their time, as those in law, or to interfere with the power to make temporary arrangements for assistance, or to affect special considerations as to salaries which may have been fixed under exceptional circumstances.

Other Officers.

The same principles as to salary and retiring allowances should, as far as possible, be applied to the other high officers.

And the following salaries are suggested :

President (when held in connection with a professorship at the full pay of \$3,200, and including allowance for house rent, thus keeping the total combined emolument at its present figures).....	\$1,800
Librarian, initial salary.....	1,200
Rising to.....	2,000
Registrar for both University and College, initial salary.....	1,000
Rising to.....	1,500
Bursar, initial salary.....	2,000
Rising to, (from which for the present house room provided \$400 should be deducted)	3,000

In this connection a letter from the bursar is appended.

By letter of 1st April, 1891, the bursar states as follows :—

With regard to my salary as bursar : At a meeting of the Board of Trustees held on 9th January, 1890, (at which all the members were present with the exception of yourself and Mr. A. H. Campbell), the following minute was made :

“It is recommended that the bursar’s salary be increased from \$2,200 to \$2,800 a year and that this increase date from 1st January, 1890.”

This minute was subsequently communicated to the Government through the Minister of Education who replied to the effect that the matter had been laid before Council, but having regard to the great demands upon the University funds it was deemed advisable that no increase should be made at present. In addition to my salary of \$2,200 I have the house in Simcoe street less the rooms occupied by the office. I am allowed \$100 per annum to cover the cost of heating, gas and attendance.

The salaries of this office are now :

Myself.....	\$2,200
Clerk	400
Boy	100
Fuel, etc	100
	\$2,800

In 1877 to June 30th, (the year of my appointment), the salaries were :

Bursar	\$2,400
Accountant, etc	1,400
Messenger	400
Fuel	90
	\$4,290

The work has *doubled* since then. I should add \$130 paid to a gentleman who assisted in keeping the accounts in the evenings. The numerous statements prepared are also done out of office hours by additional assistance. For years I did all this work myself altogether out of office hours without receiving a penny for it, but my health became affected by it and the work had to be done by others.

Under my supervision my clerk, F. A. Moure, is most efficient ; he only receives \$400 a year ; I think he should be paid a larger salary.

When I was appointed bursar the house I occupy was in a most dilapidated condition, not habitable, and about \$1,200 was expended on repairs, towards which I paid \$400 ; the building was then the property of the U. C. College. Taking all things into consideration I think this sum might be returned to me.

APPLICATION OF THESE SALARIES TO THE EXISTING STAFF.

It is of course distinctly understood that there is no intention of creating any expectation of increased remuneration beyond that specified in his contract, on the part any existing officer unless and until the time arrives when, in the opinion of the executive, the resources and the interests of the institution render proper the consideration of his case, with a view to putting his name on the salary roll for an increase on the conditions as to the retirement fund specified in this report.

The following rules may be laid down :

1. Subject to the special consideration to be stated concerning the retirement fund, no increase of salary should be granted until there are surplus revenues available for the purpose.
2. No revenues should be deemed available for the purpose until the more urgent needs of the institution for additional teaching power as well as for current expenditure are provided for.
3. In dealing with individual cases, when the revenues do not admit of meeting all at the same time, reasonable regard should be had to the view that the smaller salaries of the lower grades should be earliest improved ; and that, in cases of the same grade, the condition of those longest employed should be first ameliorated.
4. Had the revenues admitted of applying the scale to all the existing cases fully and at once, the principle might be adopted of counting the former years of service of the officer, for the purpose of ascertaining what his position would be in case he had been appointed at the proposed minimum with the yearly increment ; not, of course, with a view to any suggestion of arrears ; but in order to place him for the future.
5. But, in the condition of the revenues, it may be juster and more advantageous, so soon as funds allow, to begin a system of yearly increments, thus improving gradually, yet as rapidly as the revenues permit, the position of the various officers.

RETIREMENT FUND.

The report of the Finance Committee adopted by the Senate on January 13th, 1882, recommended as follows :—

“ It seems clear that some general equitable plan ought to be adopted, whereby contributions should be made by the Professors and other members of the staff towards a superannuation fund, and the amount of allowance and conditions of retirement declared. In this connection it would be well to consider how far the Canadian civil service superannuation system, with such modification as the difference of age on entrance involves, might serve as a basis. It is possible that the plan of reserving a portion of the salary and creating thereout a fund for each professor, bearing interest meantime, and payable, principal and interest, on retirement, might be more suitable.

In view of the recent increase in the salaries, the present time seems especially suitable for the settlement of the question.”

It is greatly to be regretted that no steps have been taken to carry out this recommendation.

Many appointments have been made, several salaries have been raised, new increases have become old, and difficulties which some years ago impeded the prosperity of the University, and expenditures which it could ill afford, will probably recur in consequence of the delay.

Further delay will make matters worse, and immediate action should now be taken.

Although the appointments are during pleasure, and carry no legal right to retiring allowances, still the University Act deals permissively with the subject; precedents have been created under that Act; and, apart from this, general experience teaches that it is expedient in the case of Government and public institutions to grapple with the question.

It is proposed to treat it by establishing, as a condition of the contract of employment, a retirement fund for each officer through the retention of a portion of the sum which would otherwise have been paid over to him as remuneration. This sum is to be kept invested and reinvested by the University with its other funds; and interest at 6 per cent. per annum compounded half-yearly is to be created on the account.

To the accumulations at the credit of the account, the officer is to have no claim during his service; but on his retirement it is to be his; or on his death in the service it is to go to his family as he may direct, or, if he have no wife or children, then as he may direct.

The charge which the University undertakes of managing the fund, and securing it absolutely, with interest at 6 per cent., and without cost to the officer, while a great advantage to the officer, will be amply repaid to the University by the freedom which the provision will give for dealing promptly with cases of infirmity or incapacity, and by the saving of charges for pensions and allowances.

The following rates of reservation are suggested :

For the salary up to \$1,000, 5 per cent.	
being for \$1,000	\$50 00
For the part between \$1,000 and \$1,800, 7½ per cent.	
being for \$800	60 00
being for \$1,800	\$110 00
For the part between \$1,800 and \$2,500, 10 per cent.	
being for \$700	70 00
being for \$2,500	\$180 00
For the part between \$2,500 and \$3,200, 15 per cent.	
being for \$700	105 00
being for \$3,200	\$285 00

APPLICATION OF REGULATIONS FOR RETIREMENT FUND.

It is proposed that this plan should be compulsory with regard to—

1. All new appointments.
2. All existing appointments in respect of which increases of salary may be made, so far as such increases will provide the means of carrying out the plan as to both the existing salary and the increase.

It is to be observed that the practical working of this provision will be to apply to the retirement fund the whole of the suggested increases in the cases of professors now receiving salaries up to \$3,000, and that it will bring the plan into earlier and more general, though not always into entire operation, in numerous existing cases, to the great general advantage

It is further proposed that all existing appointees shall have the option of taking the full benefit of the plan from the date of its inception.

While it is not possible to suggest that the contracts with existing officers shall be altered without their consent by the reservation of any part of the existing salaries, yet it would be reasonable, in conveying this offer to recent appointees, to intimate that the executive holds itself under no moral, any more than it is under any legal obligation, to propose any provision for retiring allowances out of the general funds for such more recent appointees as do not choose to accept this plan, in so far as it is left to their option.

EARLY COMMENCEMENT OF PLAN.

As already indicated, a considerable portion of the total increases will be absorbed in the retirement fund; and it is suggested that in the general interest any such increase (to an extent not exceeding \$200) as would be in the whole or largely so absorbed, should (in order to admit of the immediate commencement of the operations of the fund, and thus to facilitate a scheme which is regarded as greatly advantageous to the University) be made at an early date, irrespective of the condition at this moment of the revenue; out of which this course will involve but a trifling outlay in cash.

Our pension list a few years ago stood at \$5,260 a year.

The sooner we begin to provide against the future the better.

FINANCIAL RESULTS.

The financial results of this recommendation would be as follows:—

(1) Five Professors.

Present salaries	\$3,100 00
Increase to maximum	100 00
Total nominal	\$3,200 00
of which the whole	100 00

would be absorbed by the retirement fund, leaving the salary actually received by the professor as before \$3,100 00
and leaving a balance of \$185 to be paid into the fund at the professor's option.

(2) Three Professors.

Present salaries	\$3,000 00
Increase to maximum	200 00
Total nominal	\$3,200 00
of which the whole	200 00

would be absorbed by the fund, leaving the salary actually received as before \$3,000 00
and leaving a balance of \$85 to be paid into the fund at the professor's option.

(3) One Professor.

Present salary	\$2,500 00
Immediate increase	200 00
Total nominal	\$2,700 00
of which the whole	200 00

would be absorbed by the fund, leaving the salary actually received as before \$2,500 00
leaving \$10 to be paid into the fund at the professor's option.

(4) Bursar.

Present emoluments (salary, \$2,200, and house room valued at \$400).....	\$2,600 00
Immediate increase of	200 00
Total nominal	\$2,800 00
of which the whole	200 00
would be absorbed by the fund, leaving the emolument actually enjoyed as before	\$2,600 00
and leaving \$25 to be paid into the fund at the bursar's option.	

(5) One Professor.

Present salary	\$2,000 00
Immediate increase	200 00
Total nominal	\$2,200 00
of which	130 00
would be absorbed by the fund, leaving the salary actually received	\$2,070 00
or a cash increase of \$70, and completing the proportion of the fund.	

(6) Six Lecturers and one Demonstrator (seven in all).

Present salaries	\$1,500 00
Immediate increase	200 00
Total nominal	\$1,700 00
of which	102 50
would be absorbed by the fund, leaving the salary actually received	\$1,597 50
or a cash increase of \$97.50, and completing the proportion of the fund.	

(7) Librarian.

Initial salary	\$1,200 00
of which	65 00
would be absorbed by the fund, leaving the salary actually received	\$1,135 00

(8) One Registrar.

Present salary	\$1,000 00
Increase	200 00
Total nominal	\$1,200 00
of which	65 00
would be absorbed by the fund, leaving the salary actually received	\$1,135 00
or a cash increase of \$135, and completing the proportion of the fund.	

CASH OUTLAY.

It will be noticed that the aggregate of the immediate increases to be actually received in cash is only as follows :

One Professor	\$70 00
Six Lecturers and one Demonstrator (seven at \$97.50)	682 50
Registrar	135 00
Total	\$887 50

a sum so trifling in comparison with the general advantage to be obtained, that it may well be placed in the first order of urgency, and arranged at the earliest moment.

This matter being so arranged, the remainder of the increases should be dealt with on the general principles before laid down.

PART V.

Increase and Organization of the Teaching Staff.

GENERAL REMARKS AND RECOMMENDATIONS.—POLICY AS TO INCREASE OF YEARLY CHARGE —REMARKS AS TO THE PAST INCREASES—DETAILED COMPARATIVE TABLES FOR TEN YEARS—MODERN LANGUAGES (FRENCH, GERMAN, ITALIAN AND SPANISH), LATIN, GREEK, ENGLISH, PHYSICS, MATHEMATICS, PHILOSOPHY, CHEMISTRY, MINERALOGY AND GEOLOGY, BIOLOGY, POLITICAL SCIENCE, ORIENTAL LANGUAGES, EVIDENCE AND RECOMMENDATIONS — LIBRARIAN: EVIDENCE AND RECOMMENDATIONS — GENERAL RESULT OF RECOMMENDATIONS IN THIS PART—CLERKS, ASSISTANTS AND SERVANTS.

In dealing with the important and complicated subject of the increase and organization of the staff it will be convenient to refer in the first instance

(a) To the last general report of the Committee on Finance presented January 13th, 1882, which shows the view then taken as to the needs of the University ;

(b) To the plan for the formation of the confederation of Colleges laid before the Senate on January 9th, 1885, which shows the provisions then thought requisite ;

(c) To the University Act, R.S.O., Cap. 230, which contains the statutory provisions applicable to the case ;

(d) To the recent report of the Senate Committee on the subject of teaching in the pass classes.

The relevant extracts from these documents are as follows :

(a) The last general report of the Committee on Finance dealing with the subject referred to the present committee was presented to the Senate on January 13th, 1882, and expressed the opinion :—

“That the teaching staff should be much larger than it is at present, and should consist of separate professors or lecturers on Greek, Latin, French and Italian, German, English, Hebrew, History, Botany, Constitutional Law and Jurisprudence, Mathematics, Natural Philosophy, Mental Science, Chemistry, Physiology, Geology and Mineralogy, Zoology, Political Economy, together with a Demonstrator on Physics, a Mathematical Tutor, a Classical Tutor, and such other assistants as the numbers of certain classes might render necessary.

Besides these there should be established certain Fellowships, whose holders should have teaching functions according to the scheme proposed at a subsequent part of this report. Nor can the institution be considered complete without the establishment of an observatory, in which event there would be added a Professor of Astronomy. Such a scheme of re-organization would also necessitate a large expenditure on Library, Museums, and Laboratories.

For the purposes of the University there has for some time been the most pressing necessity for an Examination Hall. The numbers of candidates examined at the same time being now so large that they fill to overflowing Convocation Hall and all the available lecture rooms.

To all this is to be added the consideration of the question of providing facilities for the higher education of women.”

(b) The plan for the formation of a confederation of Colleges laid before the Senate on January 9th, 1885, contained the following provisions:—

7. (a) University College shall afford to all students, who desire to avail themselves thereof, the requisite facilities for obtaining adequate instruction in the following subjects in the curriculum of the Provincial University, viz.: Latin, Greek, Ancient History, French, German, English, Oriental Languages, and Moral Philosophy, provided that it shall be competent to the governing body of University College to institute additional Chairs which do not exist in the University.

(b) Attendance on instruction provided in any of the confederating colleges, including University College, shall be accorded equal value as a condition of proceeding to any degree with attendance on the work of the University professoriate.

8. There shall be established another teaching Faculty in connection with the Provincial University, to be called the University Professoriate, which shall afford to all students of the Provincial University who desire to avail themselves thereof, the requisite facilities for obtaining adequate instruction in the following subjects, in accordance with the curriculum of such University, namely: Pure Mathematics, Physics, Astronomy, Geology, Mineralogy, Chemistry, Zoology, Botany, Physiology, Ethnology, (including Comparative Philology) History, Logic and Metaphysics, History of Philosophy, Italian and Spanish, Political Economy and Civil Polity, Jurisprudence, Constitutional Law, Engineering, and such other sciences, arts, and branches of knowledge as the Senate of the Provincial University may from time to time determine, except such subjects as are prohibited from being taught by Revised Statutes of Ontario, cap. 209, sec. 9.

9. The professors in such University faculty shall be a corporation presided over by a chairman. The same person shall be President of University College and chairman of the Faculty of the University Professoriate. University College and the Faculty of the University Professoriate shall be complementary the one to the other, and afford to all University students the requisite facilities for obtaining adequate instruction in all subjects prescribed in the curriculum of the Provincial University. If in the interests of the general objects of the confederation, it shall be found advantageous to have any subject transferred from University College to the University, or from the University to University College, it shall be competent to the governing bodies of the College and University to arrange for such transfer.

15. There shall be the following staff in University College :

One Professor of	Greek.
" "	" Latin.
" "	" French.
" "	" German.
" "	" English.
" "	" Oriental Languages.
" "	" Moral Philosophy.
" Lecturer on	Ancient History.
One Tutor in	Greek.
" "	" Latin.
" "	" French.
" "	" German.
" "	" Oriental Languages.
" "	" English.
One Fellow in	Greek.
" "	" Latin.
" "	" French.
" "	" German.
" "	" English.

Additional assistance in above subjects to be provided, so that no Honor Class shall exceed twelve, or Pass Class thirty.

16. There shall be a University Professoriate adequate to give instruction in each of the following subjects, namely :—Pure Mathematics, Physics, Geology, Astronomy, Mineralogy, Chemistry, Applied Chemistry, Zoology, Botany, Ethnology, History, Italian and Spanish, Logic and Metaphysics, History of Philosophy, Political Economy and Civil Polity, Constitutional Law, Jurisprudence, Engineering. As regards Tutors and Fellows, assistance shall be provided to the University Faculty similar to that mentioned above for the college, as may be required

(c) The University Act, Chap. 230, R.S.O., provides as follows :—

5. (1) There shall be established in the University of Toronto a teaching Faculty in the following subjects, viz :—Pure Mathematics, Physics, Astronomy, Geology, Mineralogy, Chemistry (Pure and Applied), Zoology, Botany, Physiology, History, Ethnology and Comparative Philology, History of Philosophy, Logic and Metaphysics, Education, Spanish and Italian, Political Science, (including Political Economy, Jurisprudence and Constitutional Law), Engineering and such other sciences, arts and branches of knowledge, including a teaching Faculty in Medicine and in Law, as the Senate may from time to time determine, unless otherwise prohibited by this Act.

77. There shall be established in the said University College a teaching Faculty, consisting of a Professor, Lecturer and Fellow, in each of the following subjects, viz :—Greek, Latin, French, German, and English, and a Professor and Lecturer in Oriental Languages, and a Professor of Moral Philosophy, and Ancient History shall be taught in connection with the classes of Greek and Latin, and a teaching Faculty may be established in such other subjects (except Divinity) not mentioned in section 5 of this Act, as by regulation made in that behalf may be determined, subject to the approval of the Lieutenant-Governor in Council.

(d) Report—

The committee appointed to consider and report upon the details of a plan to secure more effective teaching in connection with the pass subjects of the first and second years, beg leave to report as follows :

The committee understand that the desired object is to be attained by providing that there shall be a measure of supervision of term work in pass subjects, the change thus proposed in dealing with the pass classes being analogous to the improvements introduced into some of the honor departments where supervision of the work is now the rule. Such a change would *necessarily* involve an addition to the teaching strength in those departments where it may be found requisite to divide large classes. Apart altogether from the question of supervision, the attention of the Senate has been lately directed to the necessity of forming smaller classes, in order to secure more effective teaching in the departments of Latin, French and German. This proposal to form smaller classes, it appears to your committee, should be extended to all departments where it may be found necessary, and at the same time the experiment should be tried of exercising supervision over the work of the pass classes. With regard to such supervision, the committee are of opinion that it would be desirable to have it exercised in all the Pass subjects of the first and second years. Should it be necessary, however, on account of the expense involved, to limit the operation of the scheme, it is recommended that it be applied to the departments of languages, mathematics, and philosophy, as soon as adequate provision can be made for carrying it into effect.

On the supposition that such additions to the staff as may be required will be made in these departments, if not in all, the following scheme is proposed, with the recommendation that it be applied in the first and second years of the course :

Requirements in pass work in first and second years.

1. Students in attendance on lectures are required to obtain at least 33 per cent. on the May examination, and also 33 per cent. of the aggregate number of marks assigned for the May examination ; for work done during the term, and for attendance at lectures, according to the following schedule :

May examination.....	100
Term work	30
Attendance on lectures.....	20
	<hr/>
	150

2. Reports on term work in the department of English shall be based on the essay written during the session, of which five shall be required from each student. In other departments such reports shall be based on those parts of the work which the professor or lecturer may deem most appropriate as tests of proficiency. The maximum number of marks to be assigned for term work shall be 30 ; and no candidate shall be credited with marks below 10.

Reports of attendance at pass lectures shall be required in all departments ; and marks for such attendance assigned as follows :

For attendance at four-fifths	20 marks.
“ “ two-thirds	13 “
“ “ one-half	7 “

The Senate may, for good and sufficient reasons, excuse non-registered students from attendance at lectures ; and shall dispense in such cases with the above requirements with regard to term work, except in the case of English.

The Senate shall, upon the report of the University or College Council, based upon the recommendation of a professor or lecturer, excuse registered students from Term work and attendance on lectures in individual subjects ; but no exemption shall be allowed in the case of English.

Candidates in pass subjects shall be arranged in the annual class lists in three grades, A, B, C ; the minimum for A being 75 per cent., and for B, 50 per cent. ; all under 50 to be placed in class C.

In order to give some notion of the amount of additional assistance which will be required before this scheme can be introduced, a number of memoranda from members of the staff are appended. The following analysis of these statements shews what the demands are in several of the departments.

1. Staff in Greek—Prof. Hutton, a Lecturer and a Fellow, being an addition of half the services of a Fellow.
2. Staff in Latin—Mr. Dale, and two instructors, being an addition of a Lecturer and half the services of a Fellow.
3. Staff in French—Mr. Squair, and two instructors, being an addition of a Lecturer and half the services of a Fellow.
4. Staff in German—Same as in French.
5. Staff in Mathematics—Prof. Baker, two Lecturers and a Fellow, being an addition of two Lecturers.

It also appears from the annexed memoranda that under this scheme the number of pass lectures in the department of Greek in the first and second years would be ten instead of three as at present.

In the department of Latin, the total number of lectures which would be delivered by Mr. Dale and his two assistants would be about thirty.

In each of the departments of French and German, the total number of lectures per week would be about thirty-four, of which the Fellow would take about six, the remainder being taken by the lecturer and his first assistant.

All of which is respectfully submitted,

(Sgd.) J. Loudon.

February 13, 1891.

These documents show :

(a) That nearly ten years ago the need for expansion in the teaching staff was recognized ;

(b) That six years ago, on the negotiations for confederation, it was thought necessary to fix and secure the staff for University College, which staff was definitely indicated with the important provision that additional assistance should be arranged so that no honor class should exceed 12, or pass class 30 ; and that general provision was made for an adequate University Professoriate and tutorial staff ; and

(c) That the University Act gave the force of law to the final form adopted ; and enacted the establishment of a teaching staff in University College, consisting of a professor, lecturer, and Fellow in each of the subjects of Greek, Latin, French, German and English ; a professor and lecturer in Oriental Languages ; and a professor of Moral Philosophy ; and of a teaching Faculty (not so particularly defined) in the specified subjects to be taught in the University of Toronto.

The definite and absolute provision made as to the staff of University College is obviously to be explained by the circumstances of confederation ; and it is difficult to justify, save under the plea of absolute necessity, the delay which has taken place, and which must yet take place, in the fulfilment of the statute.

(d) The report of the Senate committee shows the necessity of further teaching powers.

The increase in the number of students, and the changes in, and additions to, the curriculum have intensified the need for action.

General Recommendation.

In the interests of the institution the statute should be complied with as soon as practicable ; and meanwhile temporary provision should be made at the earliest possible moment to fill the gaps.

In adopting this course regard should be had, when deciding on the character and order of action, to the comparative as well as the absolute urgency of each case ; for it is important to take account of the degree in which, relatively to each other, the different branches have been recently advanced and made efficient ; so that the progress towards completion may be general on all lines.

A comparative table of the salaries and expenditures on the various branches for ten years past will be set out, and it is referred to as giving important information on this subject.

It shews, for example, that Logic, Metaphysics and Ethics, now comprising Logic and Metaphysics, History of philosophy and Ethics, have been doubled in professorial strength, and will in 1892 stand at \$6,500 as against \$3,600 in 1888; that Political science has been created, having three professors and a fellow, and stands at \$5,500 as against nothing in 1888; that Greek has been almost doubled, having a professor, a lecturer and half a fellow as against half a professor, half a tutor and half a fellow in 1887, and stands at \$4,850 as against \$2,300; and that English has been largely advanced, having a professor and a lecturer as against half a professor in 1887, and stands at \$4,500 as against \$1,400.

On the other hand, it shews that Latin has been rather weakened, having a lecturer and half a fellow as against half a professor, half a lecturer and half a fellow in 1887, and stands at \$1,750 as against \$2,300; that French has been left almost stationary, having a lecturer and two-thirds of a fellow as against a lecturer and half a fellow in 1888, and stands at \$1,833.33 as against \$1,750. That German has been left almost stationary, having a lecturer (also librarian), and two-thirds of a fellow as against a lecturer similarly circumstanced and half a fellow in 1888, and stands at \$1,333.33 as against \$1,250; and that Italian and Spanish has been left almost stationary, having a lecturer and two-thirds of a fellow as against a lecturer in 1888, and stands at \$1,833.33 as against \$1,500 in 1888.

POLICY AS TO INCREASE OF YEARLY CHARGE.

Before proceeding to deal with specific cases it is well to state briefly the financial facts, and to explain the general principles of action which are suggested as applicable.

As already explained, there is no surplus revenue, and our income will be fully engaged, until it is enlarged by the sale of unproductive property, or by increased rents.

The exact period of the creation of a substantial surplus is uncertain, depending as it does on the land market.

But it is reasonably certain that within a brief space there will be a substantial surplus over present expenditure, which surplus will increase till it ultimately reaches at least \$50,000 a year.

We cannot at this moment increase our expenditure without drawing on the capital of the endowment, a step which only considerations of the gravest and most pressing nature could justify.

Any immediate expenditure proposed must be judged and limited by this rule.

It becomes important then to ascertain,

(1) Whether there are any, and what, expenditures which should now be proposed.

(2) In what way and on what principle the surplus revenues as they become available should be applied; and thus at once to avoid the errors inevitable when isolated expenditures are sanctioned on detached views, and to let those interested know what to expect.

INCREASE OF STAFF.

PARTICULAR BRANCHES.

Referring now to particular branches, it is convenient to preface their consideration by the comparative table already referred to which is as follows:—

UNIVERSITY OF TORONTO AND UNIVERSITY COLLEGE.—Continued.

SUMMARY OF SALARIES, PENSIONS, ETC.

DEPARTMENT.	1891.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
5. University of Toronto, General:											
Vice Chancellor.....	450 00	400 00	400 00	400 00	400 00	400 00	400 00	400 00	400 00	400 00	400 00
Registrar, also paid as Registrar of University College and Secretary of University College Council.....	750 00	750 00	750 00	750 00	750 00	750 00	750 00	750 00	750 00	750 00	750 00
Registrar's Assistant at \$200.....	200 00	200 00	216 66	200 00	200 00	250 00	200 00	200 00	200 00	100 00	.....
Bedel and attendant on Senate, also paid as Bedel University College....	190 00	190 00	190 00	190 00	190 00	190 00	190 00	190 00	190 00	100 00	100 00
Architect.....	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00
Total	1,640 00	4,640 00	1,656 66	1,640 00	1,640 00	1,690 00	1,640 00	1,640 00	1,640 00	1,450 00	1,350 00
6. University of Toronto, Teaching Staff, etc.											
Agriculture:											
Professor of Agriculture.....	.....	.....	.....	.....	.....	.....	400 00	600 00	600 00	600 00	600 00
Modern History:											
Professor of Modern History, formerly Professor of History and English Literature.....	2,800 00	2,800 00	2,800 00	2,800 00	half history 1,400 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00
Political Science:											
Professor in Political Science.....	3,000 00	2,500 00	2,083 33	.....	.....	.....	.....	.....	.....	.....	.....
Fellow in Political Science at \$500....	500 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Professor in Constitutional and International Law (Mills).....	1,000 00	1,000 00	500 00	.....	.....	.....	.....	.....	.....	.....	.....
Professor of Roman Law, etc., etc., (Proudfoot).....	1,030 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lecturer on Constitutional History (D. R. Keys) .....	.....	.....	.....	.....	.....	.....	850 00	608 33	.....	.....	.....
Total.....	5,500 00	3,500 00	2,583 33	.....	.....	.....	650 00	608 33	.....	.....	.....

UNIVERSITY OF TORONTO AND UNIVERSITY COLLEGE. — Continued.

SUMMARY OF SALARIES, PENSIONS, ETC.

DEPARTMENT.	1891.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Biology—											
Professor of Biology, formerly Natural History and Botany	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,100 00	3,025 00
Lecturer in Physiology	1,500 00	1,500 00	1,500 00	1,500 00							
Lecture Assistant in Biology, etc.											
Fellow in Biology	500 00	500 00	500 00	500 00	500 00	500 00	500 00	500 00	500 00	75 00	100 00
Sub-Curator of Museum	524 00	524 00	524 00	524 00	524 00	524 00	524 00	524 00	524 00	491 66	480 00
Attendant and Caretaker of Biological Building	480 00	333 34									
Total	6,104 00	5,957 34	5,624 00	5,624 00	4,124 00	4,124 00	4,124 00	4,124 00	4,124 00	3,666 66	3,605 00
Italian and Spanish—											
Lecturer in Italian and Spanish	1,500 00	1,500 00	1,500 00	1,500 00	1,300 00	1,300 00	1,300 00	775 00	500 00	500 00	
Logic, Metaphysics and Ethics—											
(a) Logic and Metaphysics—											
Professor of Logic and Metaphysics, J. no. Baldwin, salary from Oct., 1889, at \$3,000 per annum	3,000 00	2,250 00									
Professor of Metaphysics and Ethics, G. P. Young, half				1,550 00	1,550 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00	1,512 50
Gratuity to Professor Young's representatives on his death, 6 months salary, half											
Temporary lectures after his death half											
Fellow in Logic and Metaphysics, half	250 00	250 00	250 00	250 00	250 00	250 00	250 00	250 00			
Total for Logic and Metaphysics	3,250 00	2,500 00	2,233 33	1,800 00	1,800 00	1,800 00	1,800 00	1,800 00	1,550 00	1,550 00	1,512 50

UNIVERSITY OF TORONTO AND UNIVERSITY COLLEGE.—Continued.

SUMMARY OF SALARIES, PENSIONS, ETC.

DEPARTMENT.	1891.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Oriental Literature—											
Professor in Oriental Literature—Dr. McCurdy formerly lecturer.....	2,000 00	2,000 00	1,833 34	1,500 00	1,375 00	500 00					
Lecturer in Oriental Literature—John Hirschfelder.....			750 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00
Total.....	2,000 00	2,000 00	2,583 34	3,000 00	2,875 00	2,000 00	1,500 00	1,500 00	1,500 00	1,500 00	1,500 00
English—											
Professor in English (W. J. Alexander) Salary from September, '89, at \$3,000	3,000 00	2,500 00									
Professor of History and English Literature, half English.....					Half English, Liter. 1,400 00	1,000 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00
Lecturer in English.....	1,500 00	1,500 00	1,500 00	1,500 00							
Total for English.....	4,500 00	4,000 00	1,500 00	1,500 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00	1,400 00
French—											
Lecturer in French. Change of Lecturer in '84, part of year's salary not paid.....	1,500 00	1,500 00	1,500 00	1,500 00	1,000 00	1,000 00	1,000 00	700 00	1,150 00	1,000 00	1,000 00
Fellow in Modern Languages, half French.....	250 00	250 00	250 00	250 00	250 00	250 00	250 00	250 00			
Second Fellow in Modern Languages at \$500, half French.....	125 00										
Total for French.....	1,875 00	1,750 00	1,750 00	1,750 00	1,250 00	1,250 00	1,250 00	950 00	1,150 00	1,000 00	1,000 00

German—

Lecturer in German, also paid as Librarian	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	937 48	750 00	750 00
Fellow in Modern Languages, half German	250 00	250 00	250 00	250 00	250 00	250 00	250 00	.....	.....	.....
Second Fellow in Modern Languages, half German	125 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total for German	1,375 00	1,250 00	1,250 00	1,250 00	1,250 00	1,250 00	1,250 00	937 48	750 00	750 00

8. University College, General—

Registrar University College and Secretary to College Council; also paid as Registrar to University	250 00	250 00	250 00	250 00	500 00	500 00	500 00	500 00	500 00	475 00
Bedel, also paid as Bedel to University	510 00	510 00	510 00	510 00	510 00	510 00	510 00	510 00	510 00	510 00
Total	760 00	760 00	760 00	760 00	1,010 00	1,010 00	1,010 00	1,010 00	1,010 00	985 00

A. MODERN LANGUAGES.

The evidence submitted on Modern Languages comprising French, German, Spanish, and Italian, is as follows :—

1. June 6th, 1890.

Memorial of Messrs. vanderSmisen, Squair, and Fraser, lecturers in Modern Languages, representing that they are unable to overtake, without further assistance, the amount of work entailed by the large and rapidly increasing number of students in their departments, and by the increased requirements of the curriculum ; that the lecturers find it impossible to increase the number of lectures given by themselves, and that the assistance rendered by the Fellow in Modern Languages, which is four hours weekly in each of the subjects of French and German, is all that can fairly be demanded of him ; that no assistance has been given in Italian and Spanish, in which help is urgently required ; and requesting that as a temporary measure of relief two fellows be appointed in modern languages for the then approaching academic year.

2. 6th August, 1890.

The memorial of the same gentlemen to the same effect, repeating their request for an opportunity of laying detailed information before the Senate.

3. 16th October, 1890.

The memorial of the same gentlemen and of Mr. Dale, lecturer in Latin, stating that these departments constitute a very large and important part of the arts course of the University, in point both of numbers of students and of difficulty of courses of study ; and stating the importance of the representation of the departments in the Councils of the University of Toronto, and of University College, in which they are not represented, and praying the Senate to devise means for remedying the evil.

3. (a)—A memorandum of facts and considerations in support of the said memorial as follows :—

Memorial.

To the Chancellor, Vice-Chancellor and Members of the Senate of the University of Toronto :

The undersigned lecturers in University College and the University of Toronto, in the departments respectively of Latin, French, German, Italian and Spanish, beg respectfully to bring to the attention of your honourable body the following statements :—

1. That the departments named above constitute a very large and important part of the arts course of the University, whether account be taken of the numbers of students in these departments or of the difficulty of the courses prescribed in them.

2. That the undersigned have sole charge of these departments, and are as entirely responsible for the teaching done in them and for their proper and efficient administration as the professors in charge of other departments.

3. That in the Councils of University College and the University of Toronto questions of University administration and policy, directly and indirectly affecting the interests of lecturers and students in these departments, are discussed and disposed of, and that in these Councils the aforesaid departments are without voice or representation.

In view of the above, the senate is respectfully requested to take the whole matter into its consideration, with the object of devising such measures as will without delay remedy a condition of things prejudicial, not only to the aforesaid departments, but also to the interests of the University in general.

(Signed) W. Dale.
J. Squair.
W. H. VanderSmisen
W. H. Fraser.

University of Toronto, 16th October, 1890.

Memorandum of facts and considerations in support of the above.

1. "The departments named constitute a very large and important part of the Arts course, etc."

(a) The number of students in the various departments of the arts course is as follows:—

On the Basis of Pass Students.

YEAR.	Greek.	Latin.	Math.	Physics.	Ethnol.	Eng.	French.	Ger.	Ital.	Span.	Chem.	Biol.	Min.	Geol.	Philos.	Logic.	Oriental.	Pol. Sc.	Hist.
Fourth	13	13	2	13	..	13	..	..	15	..	..	..	..	..	..	23	..	..	30
Third	6	18	..	6	..	21	7	..	..	..	..	..	..	14	..	..	1	..	..
Second	18	106	82	82	..	..	63	74	..	..	..	..	..	7	..	87	12	..	34
First	26	93	118	..	..	70	50	54	..	21	31	..	86	21	..	..	17	..	85
Total	63	280	102	101	..	104	120	143	..	21	31	..	86	21	..	110	30	..	149

On the Basis of Honor Students.

YEAR.	Greek.	Latin.	Math.	Physics.	Ethnol.	Eng.	French.	Ger.	Ital.	Span.	Chem.	Biol.	Min.	Philos.	Logic.	Oriental.	Pol. Sc.	Hist.
Fourth	11	11	3	5	4	22	15	15	15	15	4	7	3	14	19	2	15	..
Third	15	15	..	11	..	31	20	19	19	19	5	5	5	14	14	2	18	33
Second	20	20	18	18	..	49	30	28	27	..	23	23	23	17	21	2	37	48
First	15	17	8	..	..	53	38	36	..	..	..	..	..	..	..	..	..	..
Total	61	63	29	34	4	155	103	98	61	34	32	85	31	45	54	6	70	81

NOTE.—The statistics given are taken from the registrar's records for the session 1889-90. and are approximately correct for the current year, except in Italian and Spanish, in which subjects (owing to a change in the curriculum) the numbers are at present respectively 90 and 61.

(b) As regards "the difficulty of the courses of study prescribed in them."

This is shown by reference to the curriculum. It is assumed in this connection that honor departments are intended by the Senate to be equivalent to one another.

(c) Moreover, the departments named are *fundamental* as regards the arts course and as regards the training of teachers for the high schools. All students of the arts course are required to take Latin, and in most honor departments a knowledge of French and German is demanded. Latin and the modern languages form a very large part of the work of the secondary schools.

2. "The undersigned have sole charge of these departments, etc."

This is shown by reference to the University and College calendars. The undersigned prescribe the subjects on which lectures are given, deliver courses of lectures, superintend the work of the Fellows attached to the respective departments, and are practically responsible in every respect as regards the standard of efficiency in their departments and the discipline of students, subject only, like professors, to the general supervision of the President.

3. "The undersigned are without voice or representation on the Councils of University College and the University of Toronto."

It might perhaps be asserted that Latin is represented under the head of Classics by the professor of Greek. The two subjects are, however, entirely distinct. The professor of Greek has no control or supervision in any way over the work in Latin. He is not supposed to know the circumstances of the Latin department, and does not assume to represent it. The two departments are as distinct as, *e.g.*, those of Mathematics and Physics, each of which is represented by its own professor.

Or it might be asserted that French, German, Italian and Spanish are represented by the professor of English (one of the subjects of the Modern Language group). But the professor of English, similarly, does not assume any knowledge of, or control over, or responsibility for the work in French, German, Italian and Spanish. These departments are as distinct as, *e.g.*, those of Biology, Chemistry and Mineralogy and Geology of the Natural Science group, each of which is represented by its own professor.

It might be asserted further that, as a matter of fact, the lecturers named are consulted as to the administration of their departments. This, in any case, is a matter of courtesy and not of right, and cannot be construed as representation.

4. The Senate is requested to "devise measures to remedy a condition of things prejudicial to the aforesaid departments, and also to the interests of the University in general."

The memorialists assume that representation of the various departments on the councils is useful and desirable, as regards the just and efficient administration of the various departments and of the University in general. Hence, the want of representation is considered to be prejudicial. Specific instances are not necessary to establish this position. If desired, however, instances can be given in which the memorialists consider that the want of representation has proved to be prejudicial to the interests of their departments and of the University.

In general, owing to want of representation and the status implied by representation under existing conditions, these departments occupy, in comparison with other departments, an inferior and anomalous position.

Moreover, the feeling of injustice inseparably associated with existing conditions is calculated to disturb that harmony which is necessary to the satisfactory administration of the business of the University. In addition to what is implied in the various statements of the memorial, the reasonableness of the claim for representation is supported by the following considerations :—

- (a) Representation of the various branches of learning is evidently a recognized principle in the organization of the Councils, even when representation is not further warranted by the numerical importance of departments in respect of students.

Thus, in the Council of University College, Greek, Oriental languages and English are represented by their respective professors, while Ethics, during the temporary absence of the professor of ethics, is represented by the acting professor in that subject. It is claimed by the memorialists that no reason can be urged for the representation of Greek on this Council, which does not apply with equal force to the representation of Latin, similarly it is claimed that no reason can be urged for the representation of Oriental languages, English and Ethics, which does not apply with, at least, equal force to the representation of French and German. Besides, it appears from the University Act (50 Vict., cap. 43, sec. 77) that representation of Latin; French and German was contemplated, for the Act expressly prescribes (50 Vict., cap. 43, sec. 77) that each of the branches named shall be taught by a professor, lecturer and fellow.

In the University Council the following subjects of the arts course are represented: History and Ethnology, Physics, Mathematics, Mineralogy and Geology, Biology, Chemistry, Political science, Metaphysics (same professor also representing Ethics temporarily on the College Council), and Comparative philology (the professor in the last named subject also representing Greek on the College Council).

It is urged that the department of Italian and Spanish, which constitutes, at least, one-half of the University work in the Romance languages, has equal claims to representation with Chemistry, Mineralogy and Geology, History and Metaphysics, etc., which similarly constitute on the curriculum a *part* of the prescribed work in Natural Science and in the other departments to which they respectively belong. On the other hand, the subject of Comparative philology is accorded representation, although it does not as yet form a recognized portion of the arts curriculum, and although it is defined in the University Act (50 Vict., cap. 43, sec. 5) as not forming a department by itself, but only in connection with Ethnology.

- (b) So fully does the principle of representation appear to be carried out, that Latin, French, German, Italian and Spanish are the only departments unrepresented, while certain courses in law, under the charge of occasional professors, have full representation on the University Council.

Hence, the position of the memorialists is that they demand for their departments that representation, which, as it appears, has been granted to all other departments. They urge that their departments be organized in accordance with the requirements of the University Act. Nor can any objection reasonably be alleged on account of insufficient funds, seeing that in other departments representation has been granted irrespective of the question of salary in any given case.

4. The report of the committee of the Senate appointed to deal with (among other matters) the above, recommending, among other things, as urgent, the appointment of a second Fellow in Modern Languages; and appending statistics showing, in French (students), honors, 99; pass, 165, (including first year, 98;) total 264. Lectures 18, including (first year) 2 elementary pass, 1 advanced pass, 1 honor. In German (students), honor, 99; pass, 166 (including first year, 93;) total 265. In Italian and Spanish (students), Italian, 90; Spanish, 61; total, 151; lectures, 14; averaging two per week to each class of students.

5. 24th October, 1890.—The report of the Board of arts studies on the memorials of the lecturers in Modern Languages and the professor of Physics to the effect that the appointment of an additional Fellow in Modern Languages is urgently required.

6. January 1st, 1891.—Letter from Mr. Squair to the Registrar communicating the resolution of the Modern Language Association, No. 1, as follows:—

(1) "In view of the importance of the modern languages, both as to their intrinsic value and as to their bearing upon other subjects of study as prescribed in the curriculum of the provincial University, and in view also of the increasing attention given to these subjects in the high schools of Ontario, this Association expresses the opinion that those who may have charge of the different branches of the department of Modern Languages in the University of Toronto and in University College should be accorded a status equal to that held by the professors of the other departments.

(2) "That, in view of the importance of the study of English, French and German, this Association do request the Senate of the University of Toronto to make such changes in the regulations governing the Prince of Wales' Scholarship of the Junior matriculation as will recognize the equality of Classics, Mathematics and Modern Languages in the awarding of the said Scholarship."

7. January 10th, 1891.

The memorial of Messrs. VanderSmisen, Squair and Dale, lecturers, to the Senate as follows:—

To the Chancellor, Vice-Chancellor and Members of the Senate of the University of Toronto:—

A memorial from the lecturers in French, German, Italian, and Spanish was presented to the Senate in the month of June last, setting forth the fact that the lecturers were unable to overtake, without further assistance, the amount of work entailed by the large and rapidly increasing numbers of students in those departments, and by the increased requirements of the curriculum; and suggesting that as a temporary measure of relief two Fellows be appointed instead of one.

The memorial referred to was drawn up on the understanding that the embarrassed condition of the University funds rendered anything more than a temporary measure of relief at the time impracticable.

The lecturers subsequently appeared in support of the memorial before a committee of the Senate appointed to deal with the matter. On conferring with the committee, the memorialists, were reminded that in view of the condition of the funds, any discussion of the ultimate requirements of the departments in question as well as of all other departments would be premature.

Since the conference referred to, however, a proposition involving the expenditure of a considerable sum for the erection and maintenance of chemical and mineralogical laboratories has been considered by the Senate and referred to a committee.

In view of the contemplated expenditure involved in carrying out this proposition, the undersigned lecturers in Latin, French and German consider it their duty to lay before the Senate the statistical statement subjoined, prepared from the University class lists, showing the numbers of students in the departments named, as well as in other departments, for the years 1880 to 1890 inclusive:—

Pass Students.

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	Increase or Decrease.
Greek.....	132	140	112	105	124	126	88	120	119	116	86	46 dec.
Latin	161	167	141	146	166	177	155	189	183	258	293	132 inc.
Mathematics ...	146	145	156	144	163	150	173	118	126	152	152	} 135 inc.
Physics.....	.....	.....	.....	5	14	20	34	109	135	106	129	
English	93	93	90	93	94	91	122	127	150	152	171	78 inc.
French.....	57	66	41	51	50	54	62	98	106	135	170	113 inc.
German	13	8	9	16	10	10	18	55	61	137	175	162 inc.
Chemistry.....	58	26	42	30	31	26	48	48	47	54	57	1 dec.
Biology	5	6	10	5	5	2	23	32	32	34	25	20 inc.
Mineralogy and Geology.....	7	18	27	32	41	42	62	93	79	75	86	79 inc.
Philosophy	27	24	24	22	25	24	29	39	27	37	24	3 dec.
Logic	64	38	42	46	60	44	58	55	59	92	120	56 inc.
Oriental.....	11	13	14	17	18	28	31	29	39	30	28	17 inc.
History	54	52	46	33	42	43	49	54	57	165	191	137 inc.
Civil Polity	48	43	60	34	53	55	33	38	47	51	53	5 inc.

Honor Students.

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	Increase or Decrease.
Greek	44	44	46	46	45	50	48	54	71	66	63	19 inc.
Latin	44	44	46	47	45	52	48	54	71	66	64	20 inc.
Mathematics ...	37	34	45	42	43	28	24	30	33	27	32	} 11 inc.
Physics				17	5	15	19	14	12	13	16	
Ethnology	6	14	5	13	5	15	7	6	14	10	3	3 dec.
English	43	44	59	58	59	69	66	85	91	94	116	73 inc.
French	35	33	52	55	54	64	57	73	79	82	91	56 inc.
German	27	30	46	52	50	60	54	67	74	80	94	67 inc.
Italian	9	10	22	18	19	20	35	44	48	40	47	38 inc.
Spanish							7	18	21	17	27	
Chemistry	21	18	16	16	22	17	20	19	18	22	31	10 inc.
Biology	21	18	17	17	22	17	22	20	19	25	28	7 inc.
Mineralogy and Geology	21	18	16	16	22	17	19	16	16	21	27	6 inc.
Philosophy	59	75	65	71	72	84	68	78	72	60	33	26 dec.
Logic	39	52	49	50	47	65	34	65	48	44	20	19 dec.
Orientals	8	8	11	6	10	9	10	1	2	7	5	3 dec.
Political Science										55	64	
History	16	32	27	21	29	25	32	56	54	55	60	44 inc.
Civil Polity	34	44	47	46	47	41	55	49	51	44	21	13 dec.

The attention of the Senate is directed to the following comparisons based on the above statistics :—

The number of students in Latin, in which there is one lecturer who is assisted by half the services of the Classical Fellow, is 357 (64 honors plus 293 pass), as compared with a total in Greek of 149 (63 honors plus 86 pass), in which department there are one professor and one lecturer assisted by half the services of the Classical Fellow. As compared with other departments, the number in honor Latin (64) is considerably larger than that in honor Mathematics and Physics (48), in which there are two professors, two lecturers and two Fellows, somewhat larger than that in honor Chemistry and Biology combined (59), in which there are two professors, one lecturer and two Fellows ; while the number in Pass Latin (293) is considerably larger than in any other department of the University.

In honor French there are ninety-one students, and in honor German ninety-four, numbers far surpassing those in any other honor department, except that of English (116). The numbers in honor French and German, in each of which there is but one lecturer assisted by half the services of a Fellow, are one and a half times greater than those in honor Greek, nearly twice as large as those in honor Mathematics and Physics, nearly three times as large as those in honor Metaphysics, in which there will be, after October

next, two professors and a Fellow, and larger than the numbers in honor Chemistry, Biology and Mineralogy combined, in which there are three professors, one lecturer, three Fellows, and other assistants.

The number of students in pass French is 170, and in pass German 175, numbers much larger than those in any other pass subject except pass Latin, pass History and pass English. Of these, moreover, a considerable number are elementary students, for whom special teaching provision is indispensable.

It is apparent from the above that the provision made for the teaching of Latin, French and German, whether considered absolutely or in comparison with the equipment of other departments, is at present inadequate. Moreover, in view of prospective needs, the attention of the Senate is directed to the following comparative statement of the increase or decrease which has respectively taken place in various departments in the period covered by the statistics.

The increase in honor Latin has been from 44 in 1880, to 64 in 1890; in pass Latin from 161 to 293; as compared with a decrease in pass Greek from 132 to 86. In honor French, the increase has been from 35 to 91; in honor German, from 27 to 94; in pass French, the increase has been from 57 to 170, and in pass German, from 13 to 175. In other honor departments the increase has been much smaller, as for example, in honor Mathematics and Physics, an increase from 37 to 48; in honor Chemistry, from 21 to 31; in Biology, from 21 to 38, and so on; while in honor Philosophy there has been a decrease from 59 to 38.

The attention of the Senate is also directed to the fact that certain changes in the curriculum will add considerably to the numbers in pass French and German, to such an extent that within two years there will probably be 250 students in each of these pass subjects. [REDACTED]

The large amount of work in connection with so many students of such a variety of attainment has already made it necessary to increase the number of lectures per week in French and German to about twenty in each, a number exceeding, it is believed, those given to any other department.

The undersigned desire by the above statements and comparisons to direct the attention of the Senate to the present and prospective needs of the departments under their care. They desire also to protest respectfully against the expenditure of large sums of money in the equipment of other departments, without full consideration of the requirements of the departments of Latin, French and German, which, owing to their numerical strength and fundamental importance, both in the University and in the school system of the Province, have in the opinion of the undersigned a primary claim upon the resources of the University.

(Sgd.) W. H. Vander Smissen,
Lecturer in German.

University of Toronto,
January 10th, 1891.

J. Squair,
Lecturer in French.

William Dale, M.A.,
Lecturer in Latin.

8. The report of the committee as amended by the Senate, expressing the opinion that English, French, German, Italian, and Spanish should be represented in the Councils, and that steps should be taken by amendatory legislation for the appointment of professors or otherwise to that end.

9th May, 1890.

The report of the Board of examiners to the Senate, as follows :—

The Board of examiners desire respectfully to call the attention of the Senate of the University to the very unsatisfactory nature of the work done by pass candidates in arts at the examinations just concluded. The defective character of the work is especially marked in the first and second years, and is partially shown by the following tabular statement of some of the results :—

Subjects of Examination.	Total number of candidates.	Number who failed.	Average per cent. of marks obtained by those who failed.
1st year Mathematics	165	33	18
2nd " "	95	41	23
1st " Classics	173	53	21.5
2nd " "	112	36	22
1st " French	79	35	17
2nd " French	77	41	17.6
1st " German	79	20	21.8
1st " English	142	47	26
2nd " Philosophy	134	42	21

The Board attributes the unsatisfactory condition of things here exhibited to the growing neglect of pass subjects by candidates, and to a lack of sufficient supervision and direction arising from the inability of the teaching staff to cope with the rapidly increasing numbers of students in classes of the lower years. It is therefore respectfully suggested that the Senate should take this matter into consideration, and should devise some means of improving the pass course, especially in the first and second years.

B. FRENCH.

Mr. Squair, by paper of 27th January 1891, gives the following tables and memoranda :

Number of Students in attendance at present.

Taking Honor Work.			Taking Pass Work.	
	According to Class Roll.	According to Registrar.	According to Class Roll.	According to Registrar.
4th year.	16	17	16 plus 8—24	17 plus 12—29
3rd year.	20	23	20 " 13—33	23 " 20—43
2nd year.	42	41	42 " 63—105	41 " 99—140
1st year.	36	39	36 " 108—144	39 " 100—139
Total	114	120	114 plus 192—306	120 plus 231—351

NOTE.—All honor students take the pass work of their respective years.

Number of Lectures per week given at present.

	Pass Work.	Honor Work.			Total.
	Reading texts, Prose exercises, Dictation, etc.	Conversation and Composition.	Literature (Reading texts, etc.)	Philology (Reading old French texts, History of language, etc.)	
4th year.....	1 (24 in class).....	16 Students. 2 (8 in class).	1 (16 in class)...	1 (16 in class)...	5
3rd year.....	1 (33 in class).....	20 Students. 2 (10 in class)	1 (20 in class)...	1 (20 in class)...	5
2nd year.	105 Students. 2 (63 pass men in class). 1 (42 honor men in class)	.....	1 (42 in class)...	.....	4
1st year.....	144 Students. 3 (60 beginners in class). 1 (84 honor men and pass men in class)		1 (36 in class)...	.....	5
Total	9	4	4	2	19

Of these the lecturer takes 15 and the Fellow 4.

To these should be added supplementary lectures and hours for correcting prose with individual students, making on an average about five hours per week.

It will easily be seen that the amount of instruction given is in several items inadequate, particularly in the first and second years. To remedy this the scheme of classes below is recommended.

Number of Lectures per week necessary for present numbers.

	Pass Work.	Honor Work.			Total.
	Reading texts, Prose exercises, Dictation, etc.	Conversation and Composition.	Literature (reading texts, etc.)	Philology (reading old French texts, history of language, etc.)	
Fourth Year	2 (24 in class)	16 students. 2 (8 in class) ..	2 (16 in class)...	1 (16 in class)...	7
Third "	2 (33 in class)	20 students. 3 (7 in class) ..	1 (20 in class)...	1 (20 in class) ..	7
Second "	105 students. 2 (31 pass men in class). 1 (63 pass men in class). 1 (42 honor men in class)	.....	42 students. 2 (21 in class)...	.....	10
First "	144 students. 2 (30 beginners in class) 2 (30 beginners in class) 1 (60 beginners in class) 1 (42 honor and pass men in class) .. 1 (42 honor and pass men in class).....		2 (36 in class)...	.....	9
Total	17	5	9	2	33

In both tables the numbers on the class rolls have been considered. To these (33 hours per week) would be added a certain number of supplementary lectures and hours for the correction of prose, making an average of say seven hours per week.

To do this work the present staff must at least be doubled, i.e., instead of one lecturer and half the services of a Fellow, there must be at least two fully qualified instructors and a full Fellow. With such a staff it would be possible to record attendance and progress in all the classes, until the number of students should be increased by about 25 per cent., after which additional assistance would be necessary.

C. GERMAN.

Mr. vanderSmisssen, by letter of January 31st, 1891, gives the following statements and tables :

I beg to submit herewith for the information of the committee on the needs of the University and University College, a statement of the urgent requirements of the department of German.

In doing this, I beg to call your attention to the fact that this department is now under the charge of a lecturer, to whom are also assigned the duties, peculiarly onerous since the fire, of University librarian, and who is assisted by a Fellow, part of whose services are required for another department. I submit that this arrangement is profitable neither to the interests of the library, nor to those of the department of German, and that I ought to be placed in a position, without diminution of my present very inadequate salary, to devote myself exclusively to the latter as soon as possible.

I have asked for three fully qualified instructors, meaning thereby such instructors as are fit for the rank of lecturer. My reason for this is that, owing to the frequent changes in the fellowships, which cannot, according to the statute, be held by the same person for more than three successive years, one year in every three is all but lost, since, in the most favorable case, a new and inexperienced man has to be put in charge of certain classes once every three years. In my opinion, the only proper use of fellowships is to encourage post-graduate study, and the Fellow should not be hampered in this by such onerous duties as must at present be assigned to him. If, however, the funds of the University do not allow of such a staff, two instructors of the capacity I speak of, with a fellow as hitherto employed, might possibly be made to do the necessary work.

The figures giving the number of students at present in attendance are taken from the official registration returns in Mr. Langton's office.

1. Present attendance.

Year.	Taking honor work only	Taking pass work only.	Taking honor and pass work.
4th.....	17	7	24
3rd.....	22	18	40
2nd.....	42	91	133
1st.....	35	110	145
Totals.....	116	226	342

2. Lectures now given per week.

Year.	Texts.	Pass work. Grammar, etc.	Texts.	Honor work. Composition, etc.	Philology.
4th.....	1	2 {	1 }	2 {	1
3rd.....			2 }		1
2nd.....	1	2	1	..	..
1st.....	1	2	1	..	..

Making a total of 19 lectures.

NOTES.—(a) The lectures on the 3rd and 4th year texts are given in alternative weeks.

(b) To these hours should be added 10—12 hours per week of instruction in prose composition to smaller groups of students.

3. Number of lectures required for present numbers.

Year.	Pass work. Texts.	Grammar, etc.	Literature.	Honor work, Composition etc.	Philology.
4th.....	1	1	2	2	1
3rd.....	1	1	2	3	1
2nd.....		4	1	3	..
1st.....		5	1	3	..

NOTES.—(a) The four lectures for the 2nd year, and five for the 1st year in grammar, composition, dictation and sight translation, are required for the proper sub-division of the large classes in those years into classes not exceeding thirty. Of the five in the 1st year, two or three would be for elementary work, suitable for beginners.

(b) More lectures will be required as soon as the attendance shall have increased by (say) twenty-five per cent.

(c) Additional hours will be necessary as soon as the German seminary shall have been properly equipped, and about fifteen hours per week will be necessary for correction of prose as above.

In order to satisfy the above requirements there should be a staff of three fully qualified instructors, by which is meant such as are fit for the rank of lecturer at the least.

D. SPANISH AND ITALIAN.

Mr. Fraser by letter of 26th January, 1891, gives the following tables and statements :

Statement of requirements for the teaching of Italian and Spanish in the University of Toronto.

Italian.

Year.	Number of students in class.	Number of lectures per week.	Subject of lecture.	Additional duties.
1st.....	31	3 i. e. { 2	Grammar and texts.	A considerable amount of time is required for the correction of composition exercises and essays outside of class hours.
			Elements of Phonetics.	
2nd	37	3 i. e. { 1	Composition and Grammar.	
			Texts	
			Composition.	
3rd.....	21	3 i. e. { 2	Texts, History of Literature and Philology.	
			Composition.	
			Texts, History of Literature and Conversation.	
4th.....	14	5 i. e. { 3	Philology and old Italian texts.	

The total number of lectures per week 14.

Spanish.

Year.	Number of students in class.	Number of lectures per week.	Subject of lecture.	Additional duties.
2nd	37	3	Grammar and texts.	As in Italian. See above.
			Composition and Grammar.	
3rd.....	21	3 i. e. { 1	Texts, History of Literature and Philology.	
			Composition.	
4th.....	15	4 i. e. { 1	Texts, History of Literature.	
			Philology and old Spanish texts.	

Total number of lectures per week 10.

The estimate of the number of lectures per week (24 in all) is based on the requirements of the new curriculum (1891-5), which embraces extensive changes in the courses in Italian and Spanish, and which comes fully into force in these subjects at the beginning of the session 1892-3. The number of lectures required per week next session (1891-2), of which the work is mainly on the new curriculum, will be 21. The number of lectures given at present is 15 per week.

The staff consists at present of one lecturer, with the prospective addition of one-third of the services of the two Modern Language Fellows. In order to overtake the work in 1891-2 and afterwards, the present staff (one lecturer) will require to be increased by the addition of a Fellow whose whole time will be given to Italian and Spanish. Any considerable increase, say 25 to 35 per cent., will render subdivision of the classes in the lower years necessary, and additional provision for teaching will then be required.

The lectures in Italian and Spanish (as University subjects) are open to students of affiliated colleges, and hence the number of students in Victoria College pursuing a Modern Language course will have to be taken into account upon the removal of that institution to Toronto.

E.—LATIN.

Mr. Dale with reference to the memorial A 7 asks the attention of the Committee to the following statements :—

1. Latin, French and German (with English and Mathematics) form the foundation of the higher and Collegiate education of the Province.

2. From figures for the present session supplied by the Registrar he finds the following facts :—

(a) Latin, French and German, with a staff of three lecturers and one and a half Fellows have 1,028 pass and 319 honor.—1,347 attendances.

(b) Greek, English and Hebrew, the other three departments in University College, with a staff of three professors, two lecturers and half the services of a Fellow have but 725 Pass and 283 Honor—1,008 attendances.

(c) The subjects included in the Faculty of arts in the University, with a staff of eight or nine professors, three lecturers, and seven Fellows, have but 778 Pass and 557 Honor—1,335 attendances, i. e., actually 12 less than the three lecturers in Latin, French and German.

It thus appears that the three departments of Latin, French and German have considerably over *one-third* of the whole number of attendances in University College and the Faculty of arts combined. He thinks that no further statement is necessary to show that these three departments have the justest and strongest claims to the first consideration of the Government and the authorities, and that the steps taken to secure that consideration are fully justified by the interests of College and University involved therein.

F.—MATHEMATICS.

With reference to the memorial A 7.

Professor Baker on 31st January, gives the following statistics of the Arts and School of Science students in the department as a correction of the numbers given in the memorial, and observes that they show increased responsibility and work in the department :—

Mathematics.

—	1890.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	Increase.
Arts.....	143	145	156	144	163	150	173	118	126	152	152	} 75
School of Science..	12	13	18	17	29	41	46	41	43	49	78	

He adds that the arguments in the memorial seem convincing that improvements in the departments referred to demand the earnest consideration of those responsible for the University.

G.—PHILOSOPHY.

With reference to the comparisons and statistics in the memorial A. 7, of 10th January, 1891, Professor Baldwin gives—

1. A corrected statement of the students in philosophy for 1890 and 1891 as follows :—

Corrected Statement of Students in Philosophy Years 1890 and 1891.

1890 Pass.	1891 Pass.
Philos. 34 ; increase since 1880—7.	Philos. (alone.) 186 ; increase since 1880—159.
(No Civil Polity)	Since 1890—152.
Logic 136 ; increase since 1880—72.	Logic 139 ; increase since 1880—75.
	Since 1890—3.
1890 Honor.	1891 Honors.
Philos. 45 ; dec. since 1880—14.	Philos. (alone.) 63 ; inc. since 1880—4.
No Civil Polity.	Since 1890—18.
Logic 40 ; inc. since 1880—1.	Logic, one course in new curriculum.

The only *decrease* due to the separation of Political science from Philosophy, but more than made up by the *increase* in the present year 1891.

2. He objects to the numbers in the class lists from 1880 to 1890 as a reliable basis of comparison of the work done, because—

(a) They represent those who pass, not those who attend, with whom the teacher is concerned ; he points out that the varying proportion of those who fail is valuable as indicating where there is a lack of teaching free.

(b) A single year should not be compared with one other single year ; because one or both may be abnormal ; as were both 1880 and 1890, each of which just preceded the commencement of a new curriculum.

(c) The pass lists do not include students from affiliated colleges, whom the University teaches but does not examine.

(d) The new curriculum, *i. e.* the figures for 1891, should be considered in dealing with each and all of the departments.

(e) The year 1890 was abnormal and useless for comparison because

(1) There was no professor in the department.

(2) Students in Civil polity (now Political economy) had been counted up to 1890, but then ceased to be so counted ; thus making a difference of at least 15, and accounting for the decrease in honor Philosophy.

(3) There is an increasing number of students from the affiliated colleges taking lectures in the department, at a very low estimate, 15 for 1890 ; these are not counted.

(4) The new curriculum makes an enormous difference in the number of pass students for 1891, shown by the registrar's lists, giving :—

Pass in Philosophy, '90	34
" " '91	186
Increase	152
Honor, '90	45
" '91	63
Increase	18

3. He suggests that the time, growth, and condition of any department is best shown not by comparison with any other department, but by taking the proportion of students in the department to the whole number in the University at the same date, and that 1881 and 1891 would be the best years, as they are those which inaugurated new curricula.

4. While contesting the accuracy of the figures given in the lecturers' memorial, he adds that a very strong case remains for the Modern Language departments as regards representation on the Council, as to which he thinks the lecturers should be admitted to that of the College; and as regards remuneration, as to which he thinks the lecturers should be paid at least \$2,000 a year, and that whatever else is done the salaries of all the lecturers should be increased at once.

He adds that if new professorships are created they should be filled after public competition only, and certainly not by the hasty appointment of any one.

H.—CHEMISTRY.

With reference to the lecturers' memorial of 10th January, 1891.

Professor Pike observes as follows :—

The statistics are misleading so far as the department of Chemistry is concerned, because

(a) They contain only a small section of the total number of students to be taught, no account being taken of students of the School of Science and of the Medical Faculty.

(b) The University class lists are no guide to the numbers taught, because they exclude those who fail in several subjects, though they may have been the best of the year in some departments; and because they include students who have not been taught in University College or the University Laboratories.

Professor Pike subjoins lists of students actually taught as per registrar's lists continued up to 1887; and from reports of the School of Science with comparisons as follows :—

Pass Students.

1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	—
110 12	114 14	84 11	60 17	51 25	59 35	67 49 .....	..... 46	52 43 140	68 50 131	..... 21 145	..... 24 145	University students. School of Science. Medicals.
122	128	95	77	76	94	116	.....	235	249	.....	.....	Totals.
58	26	42	30	31	26	43	48	47	54	57	.....	As in statistics.

The above numbers are from lists furnished by the Registrar which I still have and which were discontinued in the year 1887 and also from the reports of the School of Science.

Honor Students.

1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	—
21	18	16	16 32	22 30	17 29	20 24	19 32	18 36	22 39	21 50	..... .....	Nos. as given in table. Actually taught.

I.—MINERALOGY AND GEOLOGY.

With reference to the comparisons and statistics in the Memorial A7, Professor Chapman by letter of 26th January, 1891, observes that—

The memorial much understates the number of students attending the department ; no account being taken of the School of Science students in attendance.

That instead of 113, there are between 220 and 230 students.

Pass.....	140 to 150
Honor students taking practical work :	
Undergrads. Engrs.	
2nd year. 29 22.....	51
3rd " 15 13.....	28
4th " 2 1 special.....	3
Total from.....	222 to 232
That for 1888-9 the number was.....	112
And for 1886-7.....	131

Professor Chapman observes that it is quite misleading to compare the amount of labour and time occupied in teaching Modern Languages with that involved in teaching Practical Science, in which so much manual work is involved, and so much preliminary preparation required for each lecture and lesson, that he has generally to spend an hour in preparing material for the lesson, during which (lasting commonly two hours and sometimes more) he goes from student to student explaining and demonstrating.

Further, that after lectures, much time is required to re-arrange and put away the specimens and diagrams ; so that each lesson requires at least three hours and each lecture two.

He does not deny the need of additional assistance in Modern Languages, but says the chief drudgery in these will be in looking over and correcting exercises, and that there are many poor French and Germans (male and female) in the city who could be engaged at any slight remuneration to do the work.

K.—BIOLOGY.

With reference to the Memorial A7, Dr. Macallum by letter dated February 10th, received April 1st, observes :—

1. The statistics hardly yield a fair view. For the last ten years honor work in the department began in the second year, thus keeping the number of students 40 per cent. less than in the course beginning the first year. In consequence of the change, the number of honor students has increased by 39 per cent., there being now 62 students in the course as against 21 in 1880.

2. He does not think that the number of pass students given since 1880 is quite correct. According to his memory there were more than two pass students in 1885 when he was examiner in Biology, and he knows that the number of students attending lectures has in each year since 1885 been larger than is stated. This may be accounted for by their not going up for, or passing, their examinations.

3. In each year since 1887 there have been from 110 to 150 medical students, taking pass and honor subjects in Biology and Physiology. These are University Students taking the University examinations, but are not mentioned in the tables.

4. There are other factors besides the number of students attending an hour's class ; *e.g.*, the number of hours spent in class work is equally, or far more important, as longer

hours and students laboratory work are very much more irksome and wearying than giving even four or five lectures during the day. The class hours in French and German, stated at 20 hours per week, are doubtless heavy, but they are less than is necessary in the Biological department. The laboratory staff are engaged 71 hours a week in lectures and practical class work, or, excluding the purely medical classes, 66 hours or 22 hours for each member of the staff. This is exclusive of the time spent in preparing for demonstrations, which takes up every available hour of the day.

L.—POLITICAL SCIENCE.

With reference to the Lecturer's Memorial A.7, Professor Ashley observed

(a) That it presents a strong *prima facie* claim for additional assistance; not so much on account of the comparative, as on account of the absolutely large numbers of students.

(b) That as the work, both pass and honor, for the first and second years, in both French and German, seems from the Calendar to be of a comparatively elementary character, the necessary assistance might best be secured by the appointment of tutors, as in a plan now before the Senate, without necessarily approving of any other feature of that plan.

(c) That, judging merely from the figures, it would seem that additional aid was required in History almost as much as in French or German.

(d) That the memorial, while undoubtedly presenting good reasons for strengthening the teaching staff in Latin, French and German, seems to lay undue emphasis on the numbers of students as an indication of the extent of the need. A lecture on the History, of literature, on general political or constitutional History, on Philosophy, on Philology or on the higher Mathematics, may involve more strain on the teacher than two or three hours teaching of elementary grammar, or listening to students translating.

MODERN LANGUAGES.

On the 11th April a deputation of the Modern Language Association met the committee, and discussed the subject, and presented the following paper:—

The following table shows the teaching staff of the various branches of study in the Faculty of Arts, and also the expenditure for teaching. This table of expenditure does not take into account the very large sums spent on buildings and equipment in Physics and Natural Science.

SUBJECT.	Professors.	Lecturers.	Fellows.	Total annual cost of teaching.
Greek	1	1 }	1	\$4,850 00
Latin		1 }		1,750 00
Oriental languages	1			2,000 00
English	1	1		4,500 00
Ethics	1			3,250 00
Metaphysics	1			3,250 00
History and Ethnology	1		1	2,800 00
Physics	1	1	1	5,100 00
Mathematics	1		1	3,000 00
Mineralogy and Geology	1		1	3,600 00
Biology	1	1	1	5,100 00
Chemistry	1		1	3,600 00
Political Science	1		4	3,500 00
French		1 }		1,833 33
German		1 }	1	1,833 33
Italian and Spanish		1 }		1,833 33

The inferiority of status accorded to French, German, Italian and Spanish, complained of by the Modern Language Association, is shown by the above table. Every other branch of learning, with the sole exception of Latin, is under the charge of a professor, while the subjects in question are taught by lecturers who are of inferior rank academically, and who have no voice in the administration of the departments under their care. The subordinate rank which is assigned to these languages in the organization of the University and College is furthermore shewn by the amount of money expended in payment of the teachers of these subjects, as compared with the expenditure in other subjects. It will be observed that in all the modern languages the expenditure is less than in any other department (except Latin), and that in some cases the difference is very great.

The following facts and considerations, in the opinion of the Modern Language Association, show the intrinsic value of these languages as subjects of study, and the important position occupied by them in the work of the University and the high schools, and prove that the inferiority of status referred to above is by no means warranted.

The demand which exists in the University and College for modern language teaching, relatively to that in other subjects, is shewn by the following comparative statement for the session of 1890-1 furnished by the registrar.

• NUMBER OF STUDENTS ATTENDING PASS LECTURES.

(Including all Honor Students except Fourth Year Latin and Greek).

SUBJECT.	Greek.	Latin.	Mathematics.	Physics.	English.	French.	German.	Chemistry.	Biology.	Mineralogy and Geology.	Metaphysics and Ethics.	Oriental Languages.	Political Science.	History.	Law.
Fourth Year	8	21	22	22	47	29	24	.....	.....	.....	23	10	30	.....	15
Third "	22	29	.....	31	48	42	39	.....	.....	.....	31	9	33	56	.....
Second "	60	116	.....	67	102	142	135	.....	.....	.....	157	22	.....	117	.....
First "	72	174	161	.....	193	139	145	50	86	95	.....	36	.....	128	.....
Total	162	340	183	120	390	352	343	50	86	95	211	77	63	301	15

NUMBER OF STUDENTS ATTENDING HONOR LECTURES.

SUBJECT.	Greek.	Latin.	Mathematics.	Physics.	English.	French.	German.	Italian.	Spanish.	Oriental Languages.	History.	Chemistry.	Mineralogy and Geology.	Biology.	Political Science.	Metaphysics and Ethics.	Ethnology.
Fourth Year	14	14	2	8	30	17	17	16	15	2	.....	1	2	4	19	13	27
Third "	15	15	.....	25	39	22	21	21	21	1	23	34	16	10	23	28	.....
Second "	21	21	17	.....	61	42	43	38	38	2	46	46	30	24	46	22	.....
First "	35	35	22	.....	65	39	35	31	.....	.....	.....	31	31	27	.....	.....	.....
Total	85	85	41	33	195	120	116	106	74	5	69	112	79	65	86	66	27

It will be observed that the number of honor students in each of the three departments of French, German, Italian and Spanish exceeds that of any other honor department with the single exception of English, while in many cases, the contrast is exceedingly marked.

In pass students the same numerical importance is to be noted. The number of pass students in French and German respectively exceeds that of any other pass subject except English. From this point of view, then, it appears that those subjects which have the strongest claims to organization and equipment are precisely the ones which are relegated to an inferior position.

Further, the inferiority of status complained of is not warranted by the position which these languages occupy in the courses of study prescribed in them by the curriculum of the University. Attention is specially directed to the high character of the course prescribed in honor Modern Languages. It is believed that this course will compare favorably with any other honor course prescribed in the University of Toronto both as regards the standard of excellence required, and in the usefulness of the course for purposes of education and culture. The importance of modern language study in the University is still further proved by the fact that a knowledge of either French or German is, as pass work, demanded of students in every honor department prescribed by the curriculum ; so that in this respect these languages are of fundamental importance in the work of the University.

Nor is the inferiority of status warranted by the position in which modern languages occupy in the high schools and collegiate institutes of Ontario. What has been said as to the fundamental character of the French and German as University studies is also true as regards the work of the secondary schools. In these, French and German are studied by a large and rapidly increasing number of pupils. The aggregate number of pupils in French and German is now considerably in excess of the number in Latin and Greek. This fact may be regarded as an index of the high position they now occupy, and of their increasing importance in secondary education in this country.

Not only do the reasons given above prove that the inferior status to the modern languages is unwarrantable, but, on the other hand, it was noted that their organization on a par with other branches of learning is provided for in the University Act (50 Vic. chap. 43, secs. 5 and 77). It is there expressly stated that in University College French and German shall each be taught by a professor, lecturer, and Fellow, while in the University of Toronto the teaching, and the implied organisation of Italian and Spanish as a distinct department is provided for upon the same footing with History, Physics, Mathematics, and other University subjects.

What has already been said would, we believe, be good and valid reasons for the re-organization on such a basis as justice and expediency alike demand ; but an examination of the teaching staffs of the various universities of the United States reveals an additional argument of very great force. We find that the uniform practice there is to afford an honorable status to the languages in question, a status indeed equal to that of Classics. That this is the case, the following table clearly proves :—

The staffs of American universities in Classics and Modern Languages :

P.—Professor ; A. P.—Associate Professor ; T.—Tutor, Instructor or Lecturer.

College.	Latin.	Greek.	English.	French.	German.	Remarks.
Cornell. ... {	{ 1 P. } { 1 A. P. } { 1 T. }	{ 1 P. } { 1 A. P. }	{ 2 P. } { 3 A. P. } { 3 T. }	{ 1 P. } { 3 T. }	{ 2 P. } { 2 T. }	{ In English 1 P. Emeritus.
Columbia .. {	{ 1 P. } { 1 T. }	{ 1 P. } { 1 A. P. } { 3 T. }	{ 1 P. } { 1 A. P. } { 4 T. }	{ 1 P. } { 2 T. }	{ 2 P. } { 1 T. }	
Yale {	{ 2 P. } { 2 T. }	{ 1 P. } { 1 A. P. } { 2 T. }	{ 3 P. } { 2 T. }	{ 1 P. } { 1 A. P. } { 2 T. }	{ 1 A. P. } { 3 T. }	{ Prof. Whitney as T. in French, has a professor's rank.
Michigan .. {	{ 1 P. } { 1 A. P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 A. P. } { 1 T. }	{ 1 P. } { 1 A. P. } { 1 T. }	{ 1 P. } { 2 T. }	
Virginia.... {	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 A. P. }	{ In Fr. & German }	
Kansas {	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 T. }	{ T. in Greek also T. in German.
Bowdoin ... {	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. } { 1 T. }	{ 1 P. in F. & G. } { 1 P. in F. }		{ T. in Latin also P. in French.
Amherst . {	{ 1 A. P. } { 2 P. }	{ 2 P. }	{ 1 P. } { 1 A. P. }	{ 1 P. }	{ 1 P. }	
California .. {	{ 2 P. } { 1 T. }	{ 2 P. } { 1 T. }	{ 1 P. } { 1 A. P. } { 2 T. }	{ 1 A. P. }	{ 1 P. } { 1 T. }	{ 1 P. in Latin. 1 P. in Greek. Temporary.
Williams.....	1 P.	2 P.	3 P.	{ 1 P. } { 1 A. P. }		
Howard..... {	{ 3 P. } { 3 T. and Greek }	{ 3 P. }	{ 2 P. } { 3 A. P. } { 2 T. }	{ 3 P. } { 4 A. P. } { 1 T. }	{ 2 A. P. }	

TOTALS—Professors, Latin and Greek (less two temporary).....	34
“ English (less one emeritus)	26
“ French and German	33
On Staff, Latin and Greek	57
“ English.....	43
“ French and German	52

In a word, the Classics and Modern Languages (other than English) are on a footing of almost perfect equality, all under the charge of professors, with associate professors and assistants where necessary.

The members of the Modern Language Association regard the present condition of things as highly prejudicial to the interests of modern language study, not only in the provincial University, but also in the high schools and collegiate institutes of the province. Owing to the want of status in the University, the administration of these departments through the Senate and other governing bodies is largely in the hands of those, who are necessarily ignorant of the circumstances and wants of branches of study, with the teaching of which they are not directly concerned. It is true that by the courtesy of the Senate and its committee, the lecturers in Modern Languages have at times been consulted on matters connected with their work. It is equally true, however, that on various important occasions they have had no opportunity of presenting their views

Very recently, an important and unexpected change seriously, and, we believe, *injuri-ously* affecting the standing of the modern languages, was made in the curriculum *without* the lecturers in these subjects having been invited, or permitted to present their *side* of the question.

Moreover, the subordinate status of the Modern Languages has a tendency to lead pupils in the High Schools, preparing for the University, to believe that those subjects are of less importance than others in the curriculum, and that they are unworthy of the same degree of careful and attentive study, as that which must be given to other subjects.

In conclusion, we would say, that the status of French and German to-day in the University of Toronto tends to degrade branches of study generally regarded as *essential* to liberal culture ; that it is unfair to the very large numbers of students who, pursuing pass and honor courses in these languages, are denied the help of properly remunerated teachers and professors, and that it is also detrimental to the cause of provincial *second-ary* education ; that such injustice is not warranted by the condition of other departments, or by the state of the University finances ; that it is harmful to the prestige of the *Univer-sity*, at home and abroad, to have it known that in Toronto University badly equipped departments exist ; that it is a source of possible, indeed actual friction and conflict between members of the Faculty ; and that it is condemned by comparison with the universal practice of other colleges of this continent.

In view of which circumstances, we ask that professorships be instituted in the Modern Languages.

Recommendation.

The evidence above summarized so completely demonstrates the need for further teaching strength, that it would be waste of time to enlarge upon it.

It is proper, however, to observe that the present difficulty is intensified by the fact that many students take French and German without any, or with but the slightest, previous knowledge of the subjects.

These elements should be acquired in the high schools, and not in the University. It is to be hoped that they may, in the course of the next few years, be taught universally in the schools. It is suggested that provision should be made by the University to check the practice of students taking up French and German without proof that they have already acquired an elementary knowledge of them.

It is clear that, did funds permit, the staff should be at once placed on the statutory and proper footing of a professor, a lecturer and a Fellow in each of the branches of French and German ; and that additional strength should be given in Italian and Spanish.

The following recommendations are made :—

French :

As in the first order of urgency—

The appointment of a temporary lecturer, pending the appointment of a professor.

As in the second order of urgency—

The appointment of a professor.

German :

As in the first order of urgency—

(1) The relief of the present lecturer from his duties as librarian, in order that he may devote his whole time and energy to German.

(2) The appointment of a temporary lecturer, pending the appointment of a professor.

As in the second order of urgency—

The appointment of a professor.

Italian and Spanish :

As in the first order of urgency—

The appointment of a fellow.

As in the third order of urgency—

The appointment of a professor.

LATIN.

The evidence on the subject of Latin is as follows :—

1. 16th October, 1890.

The memorial above-mentioned as No. 3 in modern languages]

(a.) The memorial of facts in support thereof mentioned as No. 3a. in Modern Languages.

2. 10th January, 1891.

The memorial above-mentioned as No. 7 in Modern Languages.

3. November, 3rd, 1890.

Letter of Mr. Dale for the information of the Senate Committee above-mentioned, stating that the most urgent requirement in the department of Latin is the immediate appointment of a professor to take charge of the subject, and that its urgency was obvious from the two considerations :—

(1.) That the number of students in Latin is greater than that in any other department in arts save perhaps English.

(2.) That with the present teaching facilities, viz., a lecturer and a fellow (who is also a Fellow in Greek), there is practically no provision whatever for teaching any of the honor work in any of the years, and appending a statement of the students registered in Latin during the session as follows : honors 82, pass 246, total 328.

4. The report of the above-mentioned Senate Committee that the requirements of the various departments (including that of Latin) were just and reasonable.

5. The report of the Board of examiners set out above as No. 9 in Modern Languages.

6. Mr. Dale by letter of 24th January, 1891, gives the following statements and tables :—

Requirements for the efficient carrying on of the pass and honor work in the department of Latin, in University College.

These requirements are made with a view to the probable increase in the number of students during the next five years.

(a) The number of students registered during the present session in the various years are respectively :—

	Pass.	Honor.	
IV. Year	21	13	NOTE.—The numbers in the pass of the 1st, 2nd, and 3rd years include also the honor students of those years respectively, as the honor students of those years take the pass work in the department.
III. "	30	14	
II. "	114	21	
I. "	173	35	
Total	338	83	

The staff, at present trying to deal with this large number of students, consists of one lecturer and half the services of the classical Fellow. Fourteen lectures per week are at present given, one of which is given by the department of Greek.

In no single year, either in the pass work, or in the honor work, can the work be efficiently carried on with the present staff, as will be seen from the following scheme which I consider indispensable for the efficient conduct of the department.

(b) The pass class of the first year should be divided into *four* sections (A. B. C. D.); the pass class of the second year into *three* sections (A. B. C.)

The subjects on which lectures are delivered are *four*, viz., authors, composition, sight translation and Roman history.

The following schemes will show the number of lectures required in the pass and honor courses respectively :—

Pass.

	Authors.	Composition.	Sight Translation.	History.	Total.
IV. Year	1	1	1	.....	3
III. "	1	.....	.....	.....	1
II. "	3	3	3	.....	9
I. "	4	4	4	1	13
	9	8	8	1	26

Honors.

IV. Year	2	1	1	1	5
III. "	2	1	1	.....	4
II. "	1	1	1	1	4
I. "	1	1	.....	.....	2
	6	4	3	2	15

The blank spaces indicate that the lectures, there omitted, are combined with those of another year, *e. g.*, the composition of the third year pass is combined.

with that of the fourth year pass, etc. Thus, it will be necessary to provide for the delivery of twenty-six pass lectures and fifteen honor lectures, or a total of *forty-one* per week. This cannot be done with less than *four* properly qualified instructors, viz., professor, two lecturers, and a fellow. By omitting pass sight translation, a most essential subject, but a subject not yet introduced into College lecturing, the lectures could be reduced to *thirty-three* and one of the lecturers dispensed with for a time.

It may seem that this demand is a large one when compared with the present equipment, but it must be remembered that the department of Latin has not yet been organized, that it is the heaviest and probably one of the most important departments in either College or University, and that it has received probably the least encouragement from the authorities of any of the departments in the University.

Recommendation.

This evidence makes a case at least as strong for Latin as has been made for French and German ; and the same observations apply.

The inequality of strength between Greek and Latin, having regard to all the conditions, is very marked.

It appears that there is some interchange of work between the members of the two staffs. It is recommended that, pending the improvement of the staff in Latin, all possible assistance should be rendered to Latin by the staff in Greek.

The following recommendations are made :—

First order of urgency—

- (1) The appointment of a temporary lecturer pending the appointment of a professor.
- (2) The assignment of the Fellow in Greek and Latin to Latin.

Second order of urgency—

The appointment of a professor.

GREEK.

The evidence on the subject of Greek is as follows :—

1. January 9th, 1891.

The memorial of Mr. Keys, lecturer in English, and Mr. Fairclough, lecturer in Greek, abstracted as No. 3 in the statement of papers under head D. English

2. Professor Hutton, by memorandum of 24th January, 1891, reports on the needs of the departments as follows :—

(1) The present staff consists of a professor, a lecturer, and a Fellow (whose services however are shared with the department of Latin).

(2) The staff, according to the University Federation Act, is to consist of a professor, a lecturer, and a Fellow in Greek (whose services are to be confined to Greek).

(3) The efficiency of the teaching in Greek would be increased up to the attainment of a fair standard, were the Act brought into force ; the present Fellow

being engaged almost entirely, as a matter of fact, in teaching Latin. During the present term, *e.g.*, he takes two lectures per week in Greek, and against this the Greek lecturer takes one per week in Latin, and the professor of Greek one per fortnight in Latin; so that the present teaching in Greek could almost be done without any Fellow at all. The appointment of a Fellow in Greek alone would therefore make more difference than appears at first sight.

(4) But if the scheme now under discussion by the Faculty (in accordance with a resolution of the Senate recommending more elaborate supervision, especially of the pass classes) were to be carried out, the department of Greek would require at once two Fellows at the very least, and strictly and literally three (or even four), if the scheme at present discussed were to be minutely followed. The essential elements of this scheme are the subdivision of the classes so that no class as a rule contain more than 25 or 30 students taking the pass course, or again more than 12 students taking the honor course. Taking as a basis for calculation the number of students in Greek to be 90 in pass classes and 55 in honor classes (according to the figures recently furnished), and assuming that the more elaborate supervision of the pass work would involve some such scheme of lectures as follows:—

	No. of classes of not more than 25.	Lectures per week on Authors to each class.	Lectures per week on prose.
4th year pass.	1	2	1
3rd year pass.	1	2	1
2nd year pass.	2	2—4 in all.	1—2 in all.
1st year pass.	2	2—4 in all.	1—2 in all.

Then results a total in pass lectures per week of 18 as against present total of 5.

Assuming that the same thorough supervision is to be extended to the honor work, some such scheme as follows would be reasonable:—

	No. of classes of not more than 12.	Lectures per week on authors to each class.	Lectures on prose, etc.
4th year honors ..	1	4	2
3rd year honors ..	1	4	2
2nd year honors ..	2	2—4 in all.	2
1st year honors ..	2	2—4 in all.	2

Total of honor lectures per week, 24, as against present total of 13.

Full total of lectures in Greek (pass and honors) per week, 42, as against present total of 18.

(5) The present total of 18 representing, as has been said in section (3), substantially the work of two men, and 10 lectures per week being taken as a reasonable average for a professor or lecturer, and 5 lectures per week for a Fellow, it appears that, if Fellows are still to be appointed under the present system, *i.e.*, with leisure for private work, the scheme proposed above would require at once a staff of five or six, according to the precise character of the lecturer; thus, if all the lecturers except the professor and permanent lecturer were to be Fellows, four Fellows would be required, and the whole staff in Greek would number six.

If again, the permanent staff consisted of two professors and a lecturer, two Fellows would be probably sufficient, and the whole staff would number five.

(6) So long as the salary of a Fellow is only \$500 per annum, I do not think the University can fairly ask him to lecture for more than five times in the week; the opportunity of private study being one of the attractions which at present enables us to secure competent men (and in Greek we have had most competent men) at a salary so inadequate.

(7) The scheme as outlined above, it will be noted, is only calculated to meet the needs of 90 pass students and 65 honor students. Any increase, therefore, in these numbers (and it is probable that the honor students' increase will more than counterbalance any further falling off in the number of pass students), will require great additions to the staff.

(8) If I may be permitted to suggest an outline for the remodelling of the Greek staff when opportunity permits, on the basis of the scheme above, I should recommend some such organization as the following:—

- (1) One professor of Greek literature,
- (2) " " history and philosophy,
- (3) One associate professor of Greek literature,
- (4) Two Fellows in Greek, if possible paid a higher salary, (\$800), and prepared to give rather a larger part of their time to teaching than at present.

In other words the running expenses of the department would be increased from some \$4,750 per annum as at present, to some \$9,700.

(10) I do not present this scheme with any idea that it is at present practicable, but on the understanding that what is asked of the Faculty is a statement of the recommendations each professor would make, were the University's revenues sufficient for all the reasonable purposes of his department.

With reference to the memorial A.7, Professor Hutton, adverting to the paragraph as to the probable effect of certain changes in the curriculum, states that he supposes this to mean, among other things, that these changes are calculated to lead to an abnormal and sudden rush of pass students into French and German. He is now convinced that this is the case, and that the principal cause therefor is the discrimination against pass Greek to which he is directing the attention of the Senate.

Recommendation.

The following recommendation is made:

Second order of urgency.—The appointment of a Fellow.

It is recommended that the further consideration of this branch be postponed.

ENGLISH.

The evidence on the subject of English is as follows:

1. November 7th, 1890..

The letter of Professor Alexander to the Registrar for the information of the above Committee, stating that the individual instruction needful for the pass students of the first and second years requires a division of existing classes into sections of not more than 30 students each; that this, with present numbers, requires 9 additional hours of teaching weekly; that in 1892-3 under the new curriculum three or four hours of additional teaching in the higher years would be required, and that the addition of a Fellow to the present English staff would enable this work to be covered. Further stating that there is great need of more practical instruction in English composition; that under the present system, by

which the University takes no account, save through examinations, of the work done during the session, it is impossible to get students to do much in the actual writing of essays; that it is highly desirable that students should be required to write a certain number of essays each session, the proper examination and criticism of which would involve a large amount of time and arduous work not to be satisfactorily performed by a Fellow; and that the addition of a lecturer who would take charge of this department is needful, if the University is to make provision for the proper study of composition.

2. The general report of the above-mentioned Senate Committee as above stated.

3. January 9th, 1891.

The memorial of Mr. Keys, lecturer in English, and Mr. Fairclough, lecturer in Greek and Grecian History, representing that their present remuneration, \$1,500 a year, is wholly insufficient to enable them to live in a manner becoming their position; still less is it sufficient to provide them with books and apparatus necessary for their work; that its inadequacy is best shown by a comparison with the salaries paid to the teachers in some of the Toronto Schools, which will show that the salaries paid to assistant masters in the Collegiate Institute and to the teachers of some of the public schools are equal to theirs, and that at least one assistant master is paid considerably more; and further, representing that their work being professional, their salaries should be greater than those of public school teachers, and at least as high as those of head masters in collegiate institutes; and praying, in view of representations made by other lecturers, for equal consideration.

4. November 29th, 1890.

Letter of Mr. Keys to the Chancellor representing that as the claim of certain sub-departments for representation in the University Councils is being pressed, that of the sub-department of English philology should be considered, and pointing out:

(1) That philology is the sole work in second year pass English, Anglo-Saxon is required of all honor students throughout, and Gothic forms an important part of the fourth year honor work.

(2) That philology is obligatory on all pass students, and the honor course in English is the most popular, the attendance in honor lectures alone being about 150.

(3) That at Oxford and Cambridge there are separate professorships of Anglo-Saxon; in Harvard and Johns Hopkins there are associate professors of Anglo-Saxon and old English; that at Yale, Columbia, Cornell and Ann Arbor there are separate chairs for literature and language.

(4) That there is a practical autonomy, the instruction in philology being entrusted wholly to the lecturer, and the teaching in Anglo-Saxon and Gothic being as distinct from that in literature as the teaching in physiology from that in biology.

5. November 29th, 1889.

Letter of Professor Alexander to the Chancellor suggesting that the sub-department of English language has similar claims to those advanced in other sub-departments for more distinct recognition and more adequate representation, referring to his inaugural address of October 12th, 1889, as indicating his view that the subjects of language and literature were distinct, and that there should be a chair for language; and expressing the opinion that the time had now arrived for action, concurring in Mr. Keys' letter, and stating that at present Mr. Keys has the whole of the philological side of the department.

6. The report of the Board of examiners set out as No. 9 in Modern Languages.

7. By letter of April 10th, 1891, Mr. Keys states as follows :

In presenting a statement of the work done in English, Philology and Rhetoric, the department under my care, a few words of explanation are necessary.

By the arrangement agreed upon by Professor Alexander and myself at the time of his appointment, as to a permanent division of labor between us, the language fell to my share. Such a division of labor rendered possible a more systematic study of the history of the language in connection with the reading of Anglo-Saxon and Middle English texts. The importance of this work has been repeatedly referred to by the President, and it is gratifying to know that at last our course may challenge comparison in this respect with those of the best American and German universities.

But in this, the first session under the new curriculum, it is impossible to bring into operation in the upper years changes which presuppose in the student a knowledge that he has not hitherto had an opportunity of acquiring. It has been necessary, therefore, to limit the amount of Anglo-Saxon, and in consequence the work done this year must not be taken as a criterion of the amount that will be required next year or the year after, when the division of work in the Fourth Year will allow a student to graduate in honors in Teutonic languages, including, on the linguistic side, Anglo-Saxon and Gothic, besides all forms of German. At least twelve or fourteen lectures in English linguistics will then be required. Before that time it is to be hoped that means will be at hand for such an equipment of the department as was suggested by Professor Alexander in his inaugural address.

During the past session I have lectured once weekly to the honor students of the 1st, 2nd and 3rd years on Anglo-Saxon. In addition, I have given a course on Spenser to the honor students of the 1st and 2nd years, and one on Macbeth to the honor students of the 3rd year. A pass course on the development of the language has been given to the 2nd year, and one on Rhetoric, based on the prose work set down in the curriculum, to the 1st year. In connection with these pass courses essays have been written by the students and examined by me to the number of over one hundred.

I have thus delivered five lectures weekly, and examined from three to a dozen essays per week through the session.

Recommendation.

The following recommendation is made :

Second order of urgency.—The appointment of a fellow.

It is recommended that the further consideration of this branch be postponed

PHYSICS.

The evidence on the subject of Physics is as follows :—

1. September 4th, 1890.—Letter from Professor Loudon to the Vice-chancellor, showing that the changes in the chemical, biological and geological departments, with regard to requirements in Physics, rendered needful some provision for additional teaching in Physics, as without this the students in these other departments could not be given the required instruction in Physics.

2. September 3rd, 1890.—Letter from Professor Wright to Professor Loudon pointing out requirements of the new curriculum as to instruction in Physics.

for Natural science students embracing a course with laboratory work for second year honor men, and adverting to the need in physics of students in the Physico-chemical department.

3. Professor Loudon.—Memorandum of work of instruction performed by the present staff, and numbers of students from different departments requiring instruction in Physics.

As provision has been made for a lecturer in Physics to meet the demands the details are not given here.

4. Professor Loudon, by letter of 3rd February, transmits the following tables, A, B and C, as showing the present condition of the department :—

A.—Courses of Experimental Lectures on Physics.

Year.	Numbers in Classes.	Lectures per week.	Length of Course.	Subjects of Lectures.	Lecturer.
I.	Medical..... 76 Arts..... 30 — 106	2	15 weeks.	Introductory course.....	Professor McKay.
II.	Arts, Pass... 48 Honor..... 17 Engineers... 22 — 87	2	22 "	{ Mechanics Hydrostatics Heat }	Professor Loudon. Mr. W. J. Loudon.
III.	Arts, Pass... 8 Honor..... 18 Engineers... 22 — 48	2	22 "	{ Optics Electricity Magnetism }	Professor Loudon. Mr. W. J. Loudon.
IV.	Arts, Pass... 14 Honor..... 8 — 22	2	8 "	Acoustics.....	Professor Loudon.

NOTE.—Each of these lectures involves several hours' work, on the part of the lecturer and mechanical assistant, in preparing the experiments.

B.—Courses of Lectures on Mathematical Physics for Honors.

Year.	Number in class.	Lectures per week.	Length of course.	Subjects of Lectures.	Lecturer.
III.....	18	4	25 weeks	{ Statics, Hydrostatics, Optics, Particle and Rigid Dynamics.	{ Prof. Loudon. Mr. W. J. Loudon. Mr. W. F. Seymour.
IV.....	8	5	25 weeks	{ Elasticity, Hydrodynamics, A- coustics, Physical Optics, Elec- tricity and Magnetism, Ther- mo-dynamics, Least Squares.	{ Prof. Loudon. Mr. W. J. Loudon. Mr. W. F. Seymour.
Total...	26	9			

NOTE.—The number of lectures per week delivered by the Professor, Demonstrator, and Fellow are, respectively 7 or 8, 5, 2 or 3.

Professor Loudon remarks that the duties of the staff may be divided into the work (1) of lecturing to the pass and honor classes, and (2) of giving practical instruction in the laboratory. In the former division of the work an introductory course of lectures has been recently added, which meets the wants of first year students in Medicine, Chemistry and the Natural sciences. In the work of the laboratory, however, it has been found impossible to meet the largely increased demands for practical instruction which come for the first time from the honor students in Chemistry and the Natural sciences, and also from students in the recently established department of mechanical engineering in the School of practical science. So great is this demand that whilst there are at present 26 students of honor Physics in the laboratory, there are 85 from other departments, including engineering, who require to be similarly provided for. The extent of the increase in this branch of the work is also shown by the following comparison between the years 1888 and 1890:—

	1888.	1890.
Laboratory students (honor Physics)	13	26
“ (other departments)	29	85
Totals	42	111

A still further increase may be looked for in the present numbers, more especially from the School of practical science, as Professor Galbraith informs me that he expects that the students in mechanical engineering will, within two years, number 58, instead of 18, as at present.

The regular instructors in the department are a professor, demonstrator and Fellow, and there is also a mechanical assistant who has charge of the apparatus and of the workshop. As this staff cannot be expected to undertake more work than is now being done, it will be necessary, in order to meet present requirements, to provide further assistance, the amount of which may be best estimated by supposing the work of lecturing to be assigned to one part of the staff, whilst the practical instruction is undertaken by the other. Under such an arrangement the former work, involving the delivery of about 17 lectures per week, would require the services of a professor and a lecturer; whilst the practical teaching in the laboratory, amounting to about 75 hours per week, would require at least the services of a demonstrator, an assistant demonstrator and a Fellow. This plan need not necessarily preclude an arrangement, such as exists at present, whereby each member of the staff might take part both in lecturing and in supervising practical work in the laboratory.

Recommendation .

The following recommendations are made:—

First order of urgency—

The appointment of an assistant demonstrator, who should hold office for a term not exceeding three years at \$700 a year.

Second order of urgency—

The appointment of a lecturer.

This latter arrangement would provide for the assumption by the University of the work done temporarily at present by Mr. A. C. McKay, and paid for at \$400 a year out of the 40 per cent. of medical fees reserved; but thought to be more properly University work required by the new curriculum.

MATHEMATICS.

The evidence on the subject of Mathematics is as follows:—

1. November 8th, 1890. Letter from Professor Baker to the Registrar for the information of the above-mentioned Senate committee, stating that for the more complete equipment of the department, a lecturer in Mathematics is necessary; and that such an appointment would allow of (a) increased attention to the individual needs of the students, by greater supervision of written exercises during the session, and by a greater division of labor; and (b) the division of the larger pass classes; and adding that the large and increasing attendance in the pass lectures has made the efficient performance of the work by himself and the Fellow no longer possible.

2. The report of the Board of examiners set out as No. 9 in Modern Languages.

3. Professor Baker states as follows:—

(a) The department would receive an equipment commensurate with its present needs by the addition of two lecturers to the present staff of a professor and a Fellow.

(b) One lecturer and an additional Fellow would be in part satisfactory.

(c) This increase in teaching power would make a division of classes possible, afford closer supervision of the student's work, and make more efficient the means from time to time employed for adding to the usefulness of the department.

(d) The fundamental character of mathematical students in the educational system, and the fact that the high school teachers receive their training in the University, involving an intimate relation between University and high school work, make the effective management of this department, in important respects, of greater consequence than labor in departments not so closely connected with the system of secondary education.

(e) By a supplementary letter of the 7th February, 1891, he says, that an appropriation of \$750 is needed for the purchase of models for the teaching of intermediate and higher geometry; that he has visited Yale, Harvard and Clark Universities, and examined their models; and has procured catalogues from Germany and Sweden, with prices; on which information this estimate is based.

4. By letter of April 13th, 1891, Professor Baker states as follows:—

My salary as professor of Mathematics is \$500 a year less than that of others of the staff occupying corresponding positions. The importance of my department, the full attendance at my lectures, and the success of my students at other universities and elsewhere, only make me the more painfully alive to the unfairness of this discrimination. My retention of the office of Dean may be regarded as a compensation. To this latter office, however, no salary attaches, and the rooms I occupy with dining-hall board is no equivalent for the services I render. I wish however you should know that while, as in the past, willing to do all in my power for University interests, I am not solicitous to continue to hold the office of Dean. Such double duties can hardly be to the advantage of my department. They necessarily draw my attention from my subjects. They also prevent me from engaging in important collateral studies. Thus this year I was anxious to get away early to Germany, to be advantageously placed and entirely free to extend my acquaintance with the language, but my connection with the Residence makes my going very doubtful.

I therefore respectfully urge that I be not discriminated against in the matter of salary; and that I be relieved of the office of Dean.

Recommendation.

The following recommendations are made :—

First order of urgency—

The appointment of a fellow.

Second order of urgency—

The appointment of a lecturer.

It is recommended that the further consideration of this branch be postponed.

PHILOSOPHY.

The evidence on the subject of Philosophy is as follows :—

1. November 5th, 1890. Letter from Professor Baldwin to the above Senate Committee stating that an additional instructor will be needed if the divisional recitation method of instruction be introduced, as is desirable in the pass courses.

2. The report of the Board of examiners set out as No. 9 in Modern Languages.

3. Professor Baldwin observes in answer to the request of the committee :—

(1.) That the general necessity for more efficient teaching of the pass classes cannot be too urgently emphasized; and that, after raising the salaries of the lecturers to a living amount, the adoption of some scheme for improving the teaching methods of the University is our first need.

(2.) That for the efficient teaching of pass Logic, Psychology and Ethics the years should be divided into classes not exceeding thirty each; which will add from sixteen to twenty hours per week to the work of the staff, not allowing for growth in numbers.

One additional lecturer will be needed for this, the two professors being more than fully occupied with the honor classes.

(3.) That the "lectures" in his department differ from those in languages, Mathematics, etc. in character; as lectures in Philosophy require thorough and profound preparation.

Two of these a day, or ten a week is the utmost that should be required; and are equal to double the number in Modern Languages. Having taught French and German himself he can compare the relative tax imposed on the lecturer by those and by Philosophy.

And this consideration takes away much of the force of the arguments for increased teaching in Modern Languages drawn from simple numbers.

Recommendation.

It is recommended that the consideration of these branches be postponed.

CHEMISTRY.

The evidence on the subject of Chemistry is given under the head of "Buildings, Etc."

Recommendation.

The question of policy raised under that head of course arises as to the staff.

If the recommendation as to the tuition of the medical students in the School of practical science is adopted, then the following recommendations are made:—

First order of urgency—

(1.) (Arts.) Provision that the salary of the demonstrator, recently authorized at \$800, shall be fixed at the regular rate suggested for such officers.

(2.) (Medicine.) Provision, out of the forty per cent. reserved from the medical fees, for the extra strength required for the tuition of the medical students, as follows:—

A demonstrator.

MINERALOGY AND GEOLOGY.

Reference is made to the evidence and recommendations under the head of 'Buildings, Etc.'

There is no demand for aid in tuition.

BIOLOGY.

The evidence on the subject of Biology is to be found in part under the head of "Buildings, Etc."

The further evidence is as follows:—

1. November 8th, 1890. Letter from Professor Wright to the registrar, stating that he assumes that his request for information as to the most pressing requirements refers only to the Faculty of Arts; and on that assumption replies by pointing out the division of the work thus:—

- (1.) General biology.
- (2.) Animal morphology.
- (3.) Animal physiology.
- (4.) Vegetable morphology.
- (5.) Vegetable physiology.

That (1) and (2) are provided by himself, and (3) by Dr. MacCallum, the lecturer; but there is no provision for botanical teaching more advanced than that contained in Number 1.

That the changes in circumstances include more practical work and the use of five afternoons in each week by the elementary first and second year classes, that the Fellow's time is fully engrossed, and the professor has himself to give much more time than before to those classes.

That therefore increased provision should be made for the teaching of botany in the university.

That in American universities of no greater importance than Toronto, a separate teacher is provided for vegetable physiology, apart from morphology and systematic botany; but that he would suggest that in the first instance a single teacher, well trained in modern laboratory methods in both aspects of botany, would suffice for present requirements.

That he has left out of consideration for the present the more effectual teaching of General biology as a pass subject, believing that the want indicated above is the more pressing.

2. The report of the committee of the Senate to which was referred the case of Dr. Macallum, lecturer in Physiology, to the effect that the subject taught by Dr. Macallum is not in any such sense subordinate to Biology as to make it improper and unnecessary that this subject should be represented in the Council of the University and that there would be positive advantage in having it independently represented.

3. The report of the committee as amended by the Senate, expressing the opinion that Physiology should be represented in the Council.

Dr. Macallum by letter dated 10th February observes, referring to the remarks he makes on memorial A. 7, (which see), as follows:—

a. Professor Wright has already urged the appointment of a lecturer in botany. He also urges this. More so because the Fellow should not perform the large amount of work now imposed on him by reason of the smallness of the staff. It leaves him hardly any time for private work and study as contemplated in the creation of fellowships. That view of the fellowship has been apparently abandoned, but no one has countenanced as much as twenty hours work per week or a Fellow, yet without a change this is necessary.

b. He knows that many of the departments are asking for increases in staff. This causes him to modify proposals of his own, and would have prevented him from writing, but that silence now would lead to the belief that the department is satisfied with the situation, and that the staff is sufficient for the very large amount of work it has to perform.

Recommendation.

The following recommendation is made:—

Second order of urgency—

The appointment of a lecturer in botany.

In the absence of Professor Ramsay Wright, it has been impossible to obtain his views on the less urgent requirements of his department; and it is suggested that on his return a statement be procured from him for reference when the deferred claims come to be considered.

POLITICAL SCIENCE.

The evidence on this subject is as follows:—

1. Professor Ashley, by letter of 23rd January, refers the committee, on the question of further assistance in the legal branch to the professors in that branch. He points out that the present arrangement can only be a temporary one, and

that soon either an additional lecturer must be appointed for one of the three subjects now assigned to Professor Proudfoot, or some arrangement must be made by which Professor Proudfoot can give greater assistance in the English law;

2. Professor Ashley in answer to the committee, suggests as desirable additions to this department—

(a) Within a couple of years a short elementary course of lectures on Commercial law.

Mr. Lash has delivered four lectures in each of the last two years; the men are very grateful.

The subject has no distinct place on the curriculum; nor perhaps would it be desirable that it should ever be compulsory for any arts student.

But it would very suitably form part of a short commercial course, should such be instituted as in Dalhousie and some other universities.

Professor Ashley is now considering in conference with bankers, how the University may be placed more closely in contact with the commercial professions, especially banking; and this would probably be an important element of any scheme.

For \$500 probably, some distinguished lawyer might give a course of fifteen lectures which would suffice.

(b) In four or five years time it will be expedient to create a lectureship in Constitutional history with special regard to Canada and the United States.

The fields of Economics and Finance are wide enough for one professor, and though a Fellow has recently been appointed with reference to constitutional history, yet in the time named the situation will be ripe for the appointment of a lecturer, beginning at \$1,000.

Recommendation.

It is recommended that the consideration of this branch be postponed.

ORIENTAL LANGUAGES.

The evidence on this head is as follows:—

1. Professor McCurdy, by letter of 21st February, 1891, states that:

(1) It seems absolutely necessary that he should have some assistance.

It is not so much a question whether he should be relieved from excessive toil, as whether the work can be properly carried on. At present he has to lecture three or four hours a day; and even when thus going to the utmost limits of his capacity is compelled to slight some of the classes and certain parts of the work.

(2) He thinks, in fairness, his salary should be raised without delay to a living standard. Since 1888 he has been serving as full professor on an allowance of but \$2,000 a year. This is \$500 less than the recognized minimum, and that minimum is received by only one member of the staff. He has, especially of late, felt this discrimination to be extremely unjust and oppressive.

(3) The number of students is now over 70; much beyond any previous year.

The Toronto Oriental course is unique among all the universities of the English-speaking world; and the whole work, especially in the training of specialists, is most promising in spite of its disabilities.

He refers for further information to Principals Caven and Sheraton.

2. Professor McCurdy on 11th April makes a further representation as follows:

I. As to the need of tutorial help—

The friends of the department have always recognized that the students of Oriental languages stand in special need of tutoring or drilling, mainly because of the peculiar difficulties which the subject offers to beginners.

The following scheme with the accompanying observations may serve to shew what has been aimed at in the lecturing and teaching, and what we have been able thus far to secure:

Year.	I. Necessary Pass Honor.	II. Desirable Pass Honor.	III. Actual Pass Honor.
I.	3	3	3
II.	2 | 4	3 | 4	2 | 3
III.	2 | 4	2 | 5	1 | 3
IV.	1 | 5	1 | 6	. 1 | 4
	21	26	17

"Oriental Literature" was made a graduating department in 1886. In 1888 I was made full professor with the sole charge of the work. At that time there were no honor students in the fourth year, as the honor work does not begin till the second year of the University course. I was therefore able in the session 1888-9 to fulfil all the duties without inconvenience, according to scale No. III. above. But I have found the work of the two following sessions exceedingly onerous, and in fact I have had to do injustice to some of my classes, so far as to rob a number of my men of the time and service which I felt I owed them. The failure to render their course complete and thorough I shall never cease to regret, and it has formed the bitterest personal experience of my University life in Toronto. The pass men of the fourth year and the honor classes of both third and fourth years have had particularly to suffer in this way. To the lower classes and to the pass men in general, who, I think, especially need sympathy and encouragement, I felt that I ought to give the most and best of my time.

Even this minimum scale of seventeen hours weekly cannot therefore be continued during next season, unless I am to have some assistance in teaching. But seventeen hours weekly is inadequate to fulfil the requirements of the course as scale No. I. is intended to indicate. Since the curriculum of 1890-95 has been introduced, the insufficiency of the present time schedule has become more than ever apparent. Only the appointment, according to the terms of the Act, of a lecturer in addition to the professor, will furnish the teaching force necessary. The assistance that would be given by a Fellow would, however, in the meanwhile make the department at least workable.

It should be added that a weekly seminary, in the work of which the more advanced students can take some independent share, is also, in my view, indis-

pensable ; especially as post-graduate students, whose claims are not otherwise at present deferred to, can thereby be materially forwarded in their studies. Such a seminary was held during the present session for several months, and was found to be very profitable. For this exercise one hour has to be added to each of the above totals.

I may say, further, that at the time of my appointment as professor in 1888, I stated to the authorities (in answer to a question by Mr. Mowat) that I expected to need the services of a Fellow after two years, as a consequence of the development of the work.

II. As to my claim for an increase of salary, I would adduce the following facts :—

In the arts faculty there are (excluding the President):—

8 professors receiving \$3,000 or over ;

1 professor receiving \$2,500, with board, etc., as Dean ;

1 professor receiving \$2,000.

This disproportion in one single case has seemed to me inexplicable except on one or the other of the following suppositions ; either that the department, in spite of its being considered worthy of an independent place as a graduating department, is not deemed to be of sufficient importance to be honored with a regular professor's allowance ; or that the incumbent is considered so conspicuously inferior to his colleagues in academical qualities as not to be worthy of a living maintenance. This conclusion has been forced upon me, particularly, by the circumstance that no relief has been afforded to me in spite of the assurances of the Minister made to me repeatedly within the last two years, that my salary would be raised as soon as funds were available for such purposes, while the department of Philosophy has within that period had an additional professor appointed, and the professor of Political science, whose appointment was almost coincident with my own, and whose salary was fixed at \$2,500, has had his allowance raised to \$3,000, and has received besides the assistance of a Fellow. The grievousness of this discrimination may be seen to be aggravated by the circumstance that in neither of the two departments just named is any work required of first year men, and the total number of hours of teaching is in neither of them nearly equal to that imperatively demanded by the Oriental course. The effect of this whole system of disfavor was to make me feel so handicapped, squeezed and humiliated, that it was at the earnest solicitation of Drs. Caven and Sheraton alone that I refrained from resigning my position last November.

The combined influence of excessive toil and inadequate remuneration has been to seriously cripple my efforts to serve the University and the world duly and worthily. The engrossment of my time with work in and for the class-room, and the necessity of using my pen for the purpose of increasing my income, have prevented me from completing and publishing text-books desirable for my own classes, and especially an extensive work by which I had hoped that Biblical and Oriental science would be somewhat advanced. I do not hold my department to be the most important of all branches of liberal or special culture, but I magnify my office in thinking that it may and ought to be occupied in promoting the glory of God and the enrichment of man's intellectual and moral estate.

The total number of students attending my classes on the Registrar's certificate during the present session was 82, classified according to years as follows :—

I.	49	
II.	23	(including 4 in honors.)
III.	4	(including 1 in honors.)
IV.	6	(including 2 in honors.)

The small number appearing in the third and fourth years is to be accounted for by the fact that this was the first session in which Hebrew options were granted pass men in these years. Most of the students are naturally looking forward to a theological course, but the ablest pupil I have had (the Governor-General's gold medallist of last year) is devoting himself to Oriental studies as his specialty for their own sake ; and one of my first year students this session was a lady.

Not only is the number of students increasing, but their interest in their studies is also growing, and their progress every year more marked. The future of the department is full of promise if the work can be efficiently carried on.

Finally, I may be allowed to say, that there is, so far as I know, no other University in the English-speaking world, except Oxford and Cambridge, where Oriental Literature ranks as an undergraduate subject with other branches of general culture. Nor am I aware that there is any other arts college in Great Britain or America where the number of Semitic students, including both graduates and undergraduates, is nearly so large as in the University of Toronto. Yet, to speak of American institutions alone, Harvard has two full professors in this department, Yale one professor with several assistants, the University of Pennsylvania three professors and Johns Hopkins one professor, an "associate" (or lecturer) and a Fellow.

3. Principal Caven and Principal Sheraton on 13th April, state as follows :—

We would respectfully press upon your earnest consideration the claims of the department of Orientals, both because of its vital importance to the work of the Theological Colleges and because of the very prominent position in recent years accorded to the investigations and studies in this department, in relation to historical and philological research.

We are strongly of the opinion that this department ought to be placed upon the same level as other departments devoted to linguistic and philological study. It is entitled to this recognition both on account of its own intrinsic importance, and on account of the character and value of the work actually carried on. Until quite recently it was placed in a markedly inferior position both as to the status and emoluments of the head of the department, and the place assigned the work in the curriculum. A partial recognition has at length been accorded, but we would respectfully urge that as soon as the resources of the University and the necessities of the various departments permit, its status, both as to the emoluments and the strength of the teaching body, should be placed more upon an equality with similar departments, and its place in the curriculum side by side with other language departments fully recognized.

Students in Orientals in the earlier years of their course require very much tutorial assistance, without which we do not think that in ordinary cases satisfactory progress can be made. The professor cannot possibly give such continuous supervision as is necessary, especially for the pass men. We would therefore represent the desirability of establishing at an early date a fellowship in Orientals, similar to the fellowships in Classics and in Moderns.

Recommendation.

The following recommendation is made.

First order of urgency : the temporary appointment of a Fellow pending the appointment of a lecturer.

Second order of urgency : the appointment of a lecturer.

LIBRARIAN.

Reference to "A" Modern Languages under the head of German, will show that from a departmental point of view the appointment of a librarian is in the first order of urgency.

This appointment is also in the same order in view of the condition of the library.

The books are now being collected and catalogued, and the whole time of a competent man is required; under the new system the library will be much more largely used than before, and its usefulness will greatly depend on the knowledge and efficiency of the librarian, who should grow up with the library.

It is recommended that a librarian be appointed.

GENERAL RESULT OF RECOMMENDATIONS.

The general result of these recommendations, grouped in the order of urgency, is as follows :—

First Order of Urgency.

	Minimum initial salary.
French, temporary lecturer.....	\$800
German (transfer of entire services of present lecturer from library to German, cost charged to German).....	1,000
German, temporary lecturer	800
Italian and Spanish, fellow.....	500
Latin, temporary lecturer.....	800
Latin, assignment of half fellow, Greek and Latin.....	250
Physics, assistant demonstrator	700
Mathematics, fellow.....	500
Chemistry, provision for yearly increase to demonstrator..	100
Oriental languages, temporary fellow.....	500
Librarian (necessary in order to transfer of lecturer to German, cost charged to German).....	1,200
Total	\$7,150

Second Order of Urgency.

	Minimum initial salary.
French, professor	\$2,500
German "	2,500
Latin "	2,500
Greek, fellow.....	500
English "	500
Physics, lecturer	800
Biology "	800
Oriental languages, lecturer.....	800
Total	\$10,900

But from this is to be deducted the relief from the salaries, to be obtained by these appointments.

The minimum relief, even assuming the appointments to be all made during the next financial year, will be as follows:—

French, temporary lecturer	\$900
German " "	900
Latin " "	900
Oriental languages, temporary fellow	500
Total	\$3,200

Thus reducing the total addition of charge in the second order of urgency to \$7,700.

But it may be thought expedient by the Executive, either with a view to earlier action than the condition of the funds will otherwise allow, or from other considerations affecting the filling of the chairs, to appoint in one or more cases to associate professorships.

In case any of the chairs are so filled, the balance of \$7,700 will be further reduced by the difference of salary between a professor and an associate professor, being \$700 for each chair so filled, making a further possible reduction in charge of \$2,100, which would bring down the initial charge to \$5,600.

And in case it is thought expedient by the Executive to appoint any present lecturer to a chair, the balance would be reduced by the difference between the salary of such lecturer and that of the temporary lecturer, making at present \$700 for each chair so filled.

Third Order of Urgency.

Italian and Spanish, professor	Minimum initial salary. \$2,500
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PROBABLE TIME FOR ACTION.

These figures show the probability that our finances will admit of the cases in the first order of urgency, including therein the establishment of the retirement fund, being dealt with during the next financial year; and of the remainder being disposed of perhaps in part during the same year, and at any rate soon after.

DEFERRED CLAIMS.

It is proposed that the deferred claims should be taken up and dealt with comprehensively as soon as the condition of the finances gives a prospect of their being met.

CLERKS, ASSISTANTS AND SERVANTS.

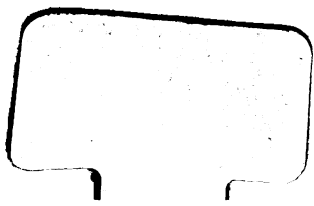
It is recommended that these cases, which are not numerous or comparatively important to the University, but which are of consequence to the individuals, and should be regulated, be taken up by the authorities for inquiry and action; as they are not conceived to fall within the scope of this reference.

The whole unanimously adopted.

UNIVERSITY OF TORONTO,
April 13th, 1891.

(Sgd.) EDWARD BLAKE,
Chairman.





Educ 5875.12.91
Revenues and requirements;
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